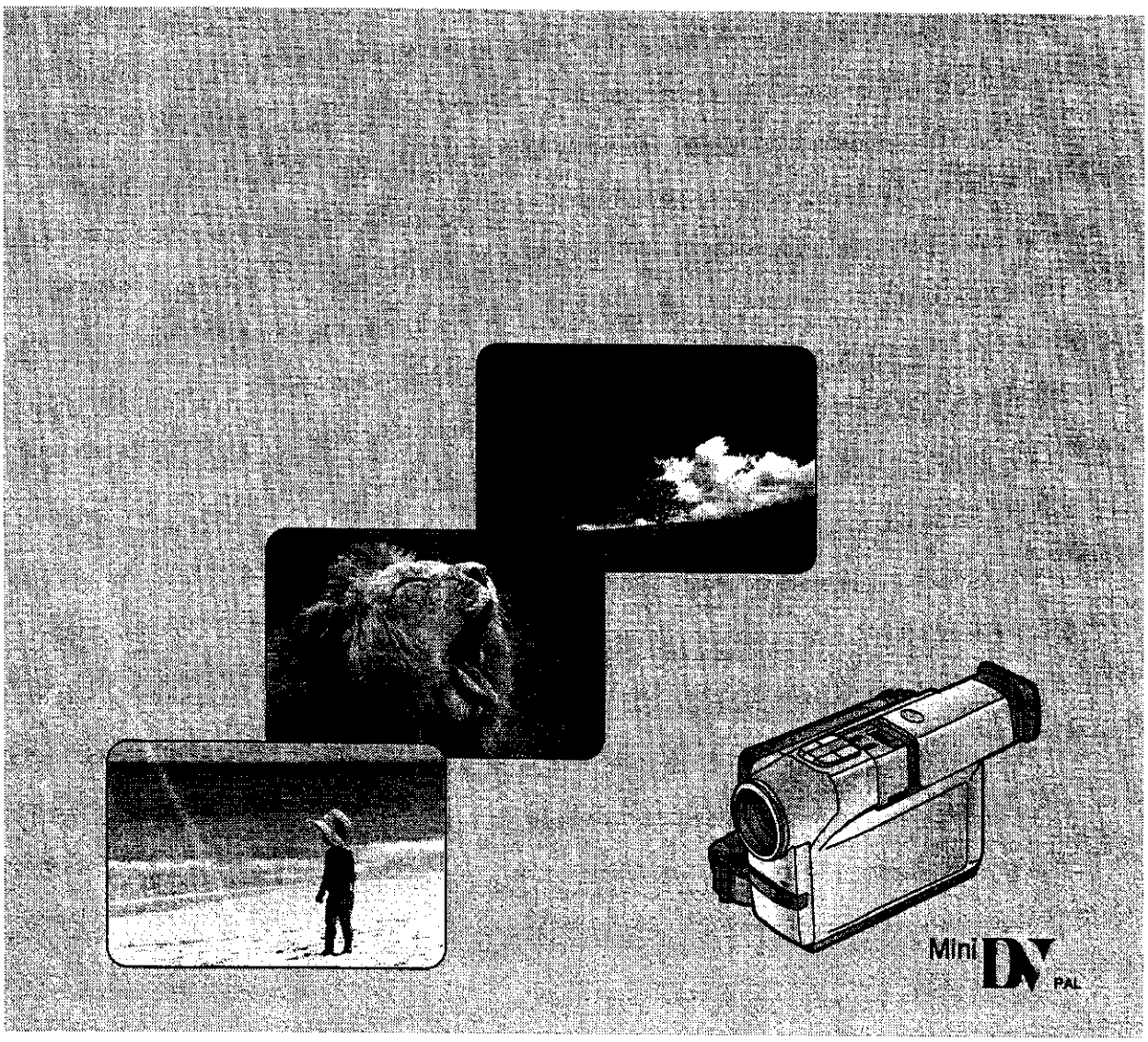
Panasonic

Digital Video Camera
數位攝錄影機

NV-DS1EN

Operating Instructions
使用說明書
Инструкция по эксплуатации
إرشادات التشغيل

Model No. NV-DS1EN



Before use, please read these instructions completely.
使用前，請詳細閱讀本說明書。

ENGLISH

Information for Your Safety

WARNING
To reduce the risk of fire or shock hazard and annoying interference, use only the recommended accessories and do not expose this equipment to rain or moisture. Do not remove the cover (or back); there are no user serviceable parts inside. Refer servicing to qualified service personnel.

Movie Camera
- **The rating plate is on the underside of the Movie Camera**

AC Adaptor
- **The rating plate is on the underside of the AC Adaptor.**
- **As this equipment gets hot during use,operate it in a well ventilated place; do not install this equipment in a confined space such as a book case or similar unit.**

■ Carefully read the Operating Instructions and use the Movie Camera correctly.

- **Injury or material damage resulting from any kind of use that is not in accordance with the operating procedures explained in these Operating Instructions are the sole responsibility of the user.**

Try out the Movie Camera.
Be sure to try out the Movie Camera before recording your first important event and check that it records properly and functions correctly.

The manufacturer is not liable for loss of recorded contents.
The manufacturer shall in no event be liable for the loss of recordings due to malfunction or defect of this Movie Camera, its accessories or cassettes.

Carefully observe copyright laws.
Recording of pre-recorded tapes or discs or other published or broadcast material for purposes other than your own private use may infringe copyright laws. Even for the purpose of private use, recording of certain material may be restricted.

Pages for reference
Pages for reference are indicated with an arrow, for example: (➔ 00).

Special symbols in the text
- ♦ Notes and cautions
- ● Result of preceding operation step and additional comments.

中文

您的安全信息

警告
為了減少火災或觸電危險，以及噪音干擾，請只使用推薦的附件，且勿讓本機遭淋雨或受潮。勿拆卸外殼(或後蓋)，內部沒有用户可以維修的部件。請將維修工作委託給專業維修人員。

攝錄影機
- **額定銘牌位於攝錄影機的底側。**

交流轉接器
- **額定銘牌位於交流轉接器的底側。**
- **由於該設備在使用中會變熱，所以，請在通風良好之處進行操作。且勿將該設備置於書櫃或類似之物品的封閉空間內。**

■ 仔細閱讀使用説明書，並正確地使用攝錄影機。

- **如果未遵守本使用説明書所介紹的操作步驟進行操作，則由此產生的故障或部件損壞將純屬用户的責任。**

試拍攝錄影機。
對於拍攝內容的丟失，製造廠家將不予賠償。
對於因該攝錄影機、其附件或錄影帶的功能失常或損壞而造成的拍攝失敗，製造廠家將不負責任何賠償。

小心遵守版權法。
對原像帶、影像盤、以及其它音像出版物或廣播節目進行私用目的以外的錄影時，可能會違犯版權法。即使為私用目的，某些節目的拍攝也可能會受到限制。

參看頁號
參看頁號用箭頭表示，例如: (➔00)。

文章中的特殊符號
- ♦ 注意和注意事項
- ● 進行操作步驟的結果和增加注解。

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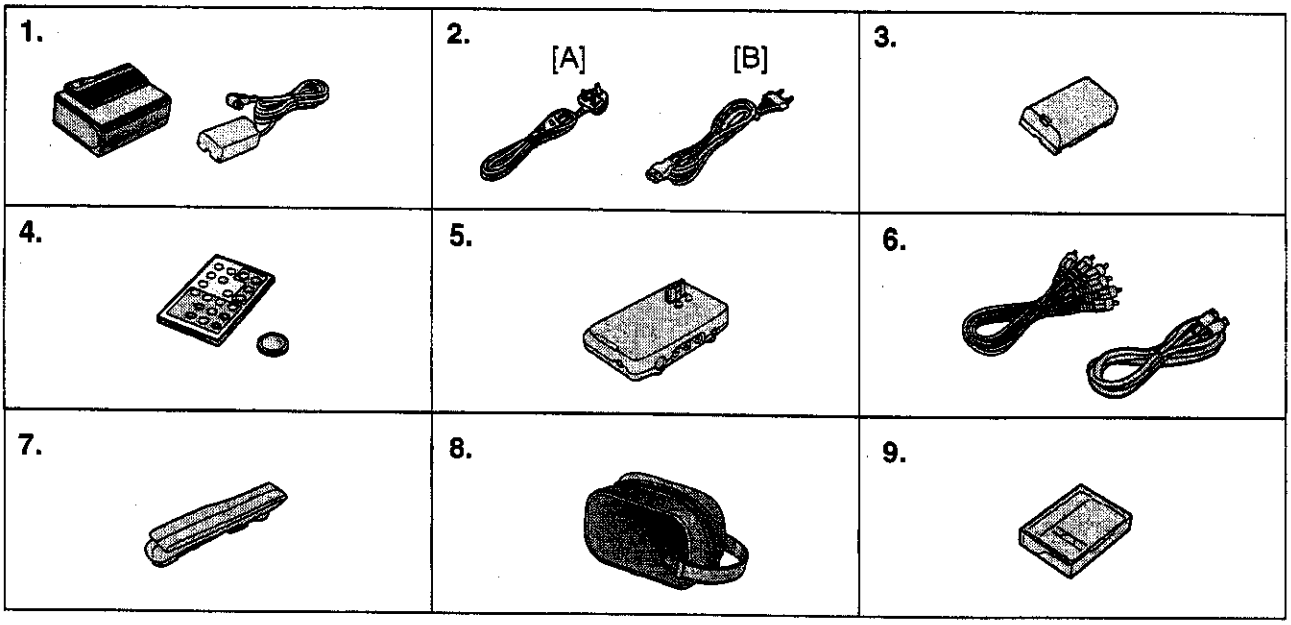

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Standard Accessories

1. **AC Adaptor (➔ 16, 18)**
   To supply power to the Movie Camera.
   To charge the Battery.

   DC Input Cable (➔ 16)
   To connect the AC Adaptor to the Movie Camera and to an AC mains socket.

2. **AC Mains Cable (➔ 16, 18)**
   To connect the AC Adaptor to the Movie Camera and to an AC mains socket.
   [A] Hong Kong Only
   [B] Area others Hong Kong

3. **Battery Pack (➔ 18)**
   To supply the Movie Camera with power.

4. **Remote Controller and Button-Type Battery (➔ 92, 98)**

5. **Output Terminal Box (➔ 52, 54, 102)**
   Equipped with AV Sockets, Edit Socket, Digital Still Picture Terminal and Headphones Socket.

6. **AV Cable (➔ 102, 106, 108)**
   S-Video Cable (➔ 102, 106, 108)

7. **Shoulder Strap(➔ 28)**

8. **Soft Bag**
   When not using the Movie Camera or carrying it in the hand, store it in this bag.

9. **Mini DV Cassette (➔ 22)**

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標準附件

1. **交流轉接器** (➔ 16,18)
   給攝錄影機供電。
   給電池充電。

   直流輸入纜線 (➔ 16)
   將交流轉接器連接至攝錄影機和交流主插座。

2. **交流主纜線** (➔ 16,18)
   將交流轉接器連接至攝錄影機和交流主插座。
   [A] 僅限於香港
   [B] 香港以外地區

3. **電池組** (➔ 18)
   給攝錄影機供電。

4. **遙控器和鈕扣式電池** (➔ 92,98)

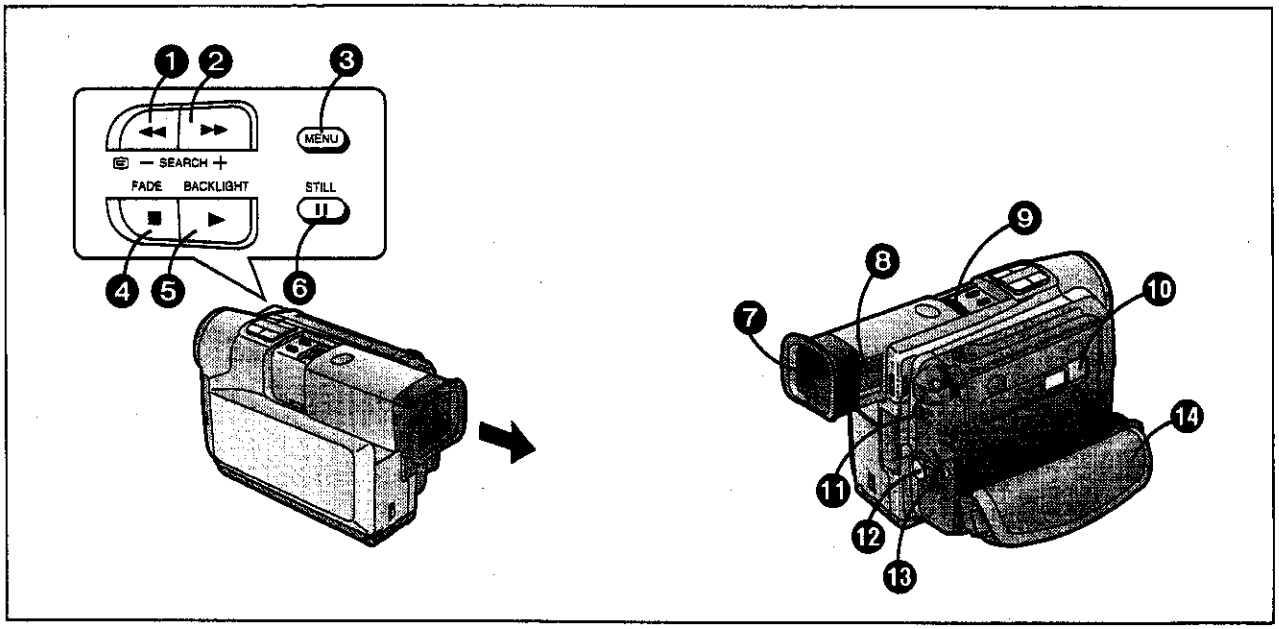
5. **輸出端子底座** (➔ 52,54,102)
   備有AV插座、編輯插座和數位靜畫端子。

6. **AV纜線** (➔ 102,106,108)
   S-Video纜線 (➔ 102,106,108)

7. **肩用背帶** (➔ 28)

8. **軟包**
   當不用攝錄影機或拿在手中進行攜帶時，請將其放入軟包之中。

9. **微型DV錄影帶** (➔ 22)



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Controls and Components

- ❶ **Reverse Search Button/Rewind/Review Button/Recording Check Button [◀◀] (➜ 32, 44, 46, 56)**
- ❷ **Forward Search Button/Fast Forward/ Cue Button [▶▶] (➜ 46, 56)**
- ❸ **Menu Button [MENU] (➜ 40, 118)**
- ❹ **Fade Button/Stop Button [■] (➜ 44, 66)**
- ❺ **Backlight Button/Play Button [▶] (➜ 32, 44)**
- ❻ **Still Button/Pause Button [❚❚] (➜ 42, 50)**
- ❼ **Finder (➜ 26)**
- ❽ **Eyepiece Corrector Dial (➜ 26)**
- ❾ **Multi-Function [PUSH] Dial (➜ 34, 40, 42, 50, 58, 68, 74, 80, 82, 84, 86, 118, 126, 130)**
- ❿ **Cassette Compartment Lock Button [△LOCK] (➜ 22)**
- ⓫ **VCR (Playback) Mode/Camera (Recording) Mode Button (and Lamps) (➜ 30, 44)**
- ⓬ **Recording Start/Stop Button (➜ 30)**
- ⓭ **Power Switch [POWER ON/OFF] (➜ 26, 30)**
- ⓮ **Grip Belt (➜ 28)**

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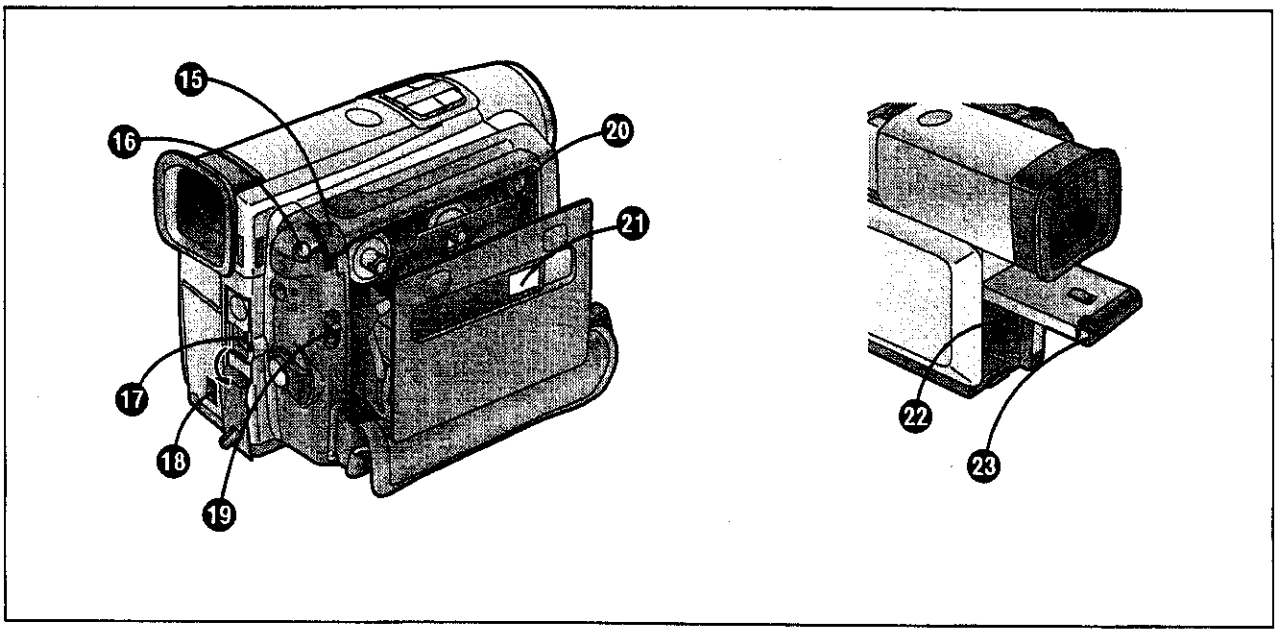
控制和組件

- ❶ 反向尋影鈕/倒帶/倒帶尋影鈕/錄影檢查鈕[◀◀] (➜ 32,44,46,56)
- ❷ 正向尋影鈕/快進/快進尋影鈕[▶▶](➜ 46,56)
- ❸ 菜單鈕[MENU](➜ 40,118)
- ❹ 淡化鈕/停止鈕[■](➜ 44,66)
- ❺ 逆光鈕/重復放影鈕[▶](➜ 32,44)
- ❻ 靜止鈕/暫停鈕[❚❚](➜ 42,50)
- ❼ 電子尋像器(➜ 26)
- ❽ 目鏡校正環(➜ 26)
- ❾ 多功能盤/暫停鈕[PUSH](➜ 34,40,42,50,58,68,74,80,82,84,86,118,126,130)
- ❿ 磁帶室蓋鎖定鈕[△ LOCK](➜ 22)
- ⓫ 錄放影機(放影)狀態/攝錄影機(錄影)狀態鈕(和燈) (➜ 30,44)
- ⓬ 錄影開始/停止鈕(➜ 30)
- ⓭ 電源開關[POWER ON/OFF](➜ 26,30)
- ⓮ 扣抓皮帶(➜ 28)



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⑮ Zoom Lever [W/T] (➜ 36)

⑯ Photoshot Button [PHOTO SHOT] (➜ 38)

⑰ DV Terminal [DV] (➜ 104)
To input/output digital signals.
Connect it to digital video equipment with IEEE1394-compatible DV terminal.

⑱ Battery Compartment Cover Open Lever [▲BATTERY] (➜ 18)

⑲ Cassette Eject Button [⏏EJECT] (➜ 22)

⑳ Cassette Compartment (➜ 22)

㉑ Cassette Compartment Window (➜ 22)

㉒ Battery Eject Lever (➜ 18)

㉓ Cover for DC Input Cable Slot (➜ 16)

中文

⑮ 變焦柄 [W/T] (➜ 36)

⑯ 拍照鈕 [PHOTO SHOT] (➜ 38)

⑰ DV (數位影像) 端子 [DV] (➜ 104)
可輸入/輸出數位信號。
將其連接至帶有與 IEEE1394 對應的DV 端子的數位影像設備。

⑱ 電池室蓋打開柄 [▲ BATTERY] (➜ 18)

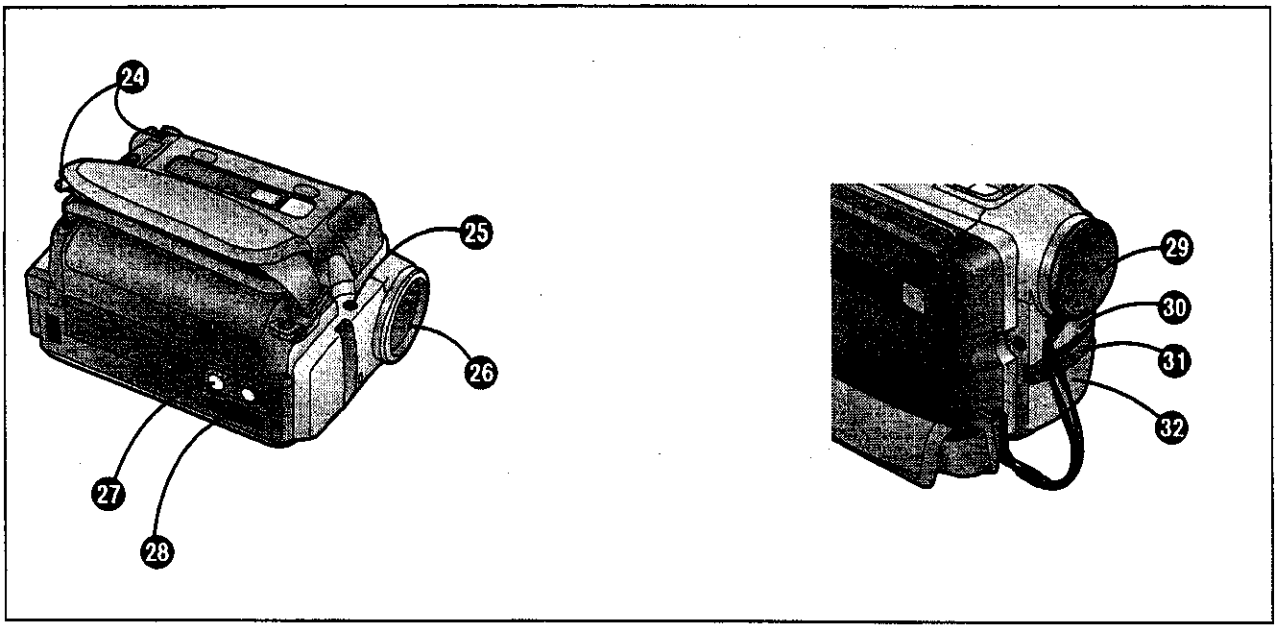
⑲ 磁帶排出鈕 [⏏ EJECT] (➜ 22)

⑳ 磁帶室蓋 (➜ 22)

㉑ 磁帶室蓋窗口 (➜ 22)

㉒ 電池排出柄 (➜ 18)

㉓ 直流輸入纜線口蓋 (➜ 16)



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㉔ **Shoulder Strap Holders (➜ 28)**

㉕ **Microphone Socket [MIC]**
To connect an external microphone or audio equipment. (Connecting to this socket deactivates the built-in microphone.)

Socket:	M3-type
Impedance:	Less than 4.7 kohm
Type:	Stereo (When connecting a mono microphone, no sound is recorded on the right channel.)
Sensitivity:	Approx. –70 dB
Power Source for Microphone:	Unnecessary

㉖ **Lens**

㉗ **Tripod Receptacle**
To mount the Movie Camera on an optional tripod.

㉘ **Multi Terminal [MULTI] (➜ 54, 102)**

㉙ **Lens Cap (➜ 54, 82)**

㉚ **Recording Lamp (➜ 30)**

㉛ **White Balance Sensor (➜ 150)/ Remote Control Sensor (➜ 100)**

㉜ **Microphone (built-in, stereo)**

中文

㉔ **肩用背帶環**(➜28)

㉕ **麥克風插孔**[MIC]
可連接外部麥克風或音頻設備(連接了該插孔時，將使內藏麥克風失效)。

插孔:	M3型
阻抗:	4.7千歐以下
類型:	立體聲 (當連接了單聲麥克風時，右聲道上將不會錄製聲音。)
靈敏度:	約－70分貝
麥克風電源:	不需要

㉖ **鏡頭**

㉗ **三角架連接孔**
可將攝錄影機安裝在選購三角架上。

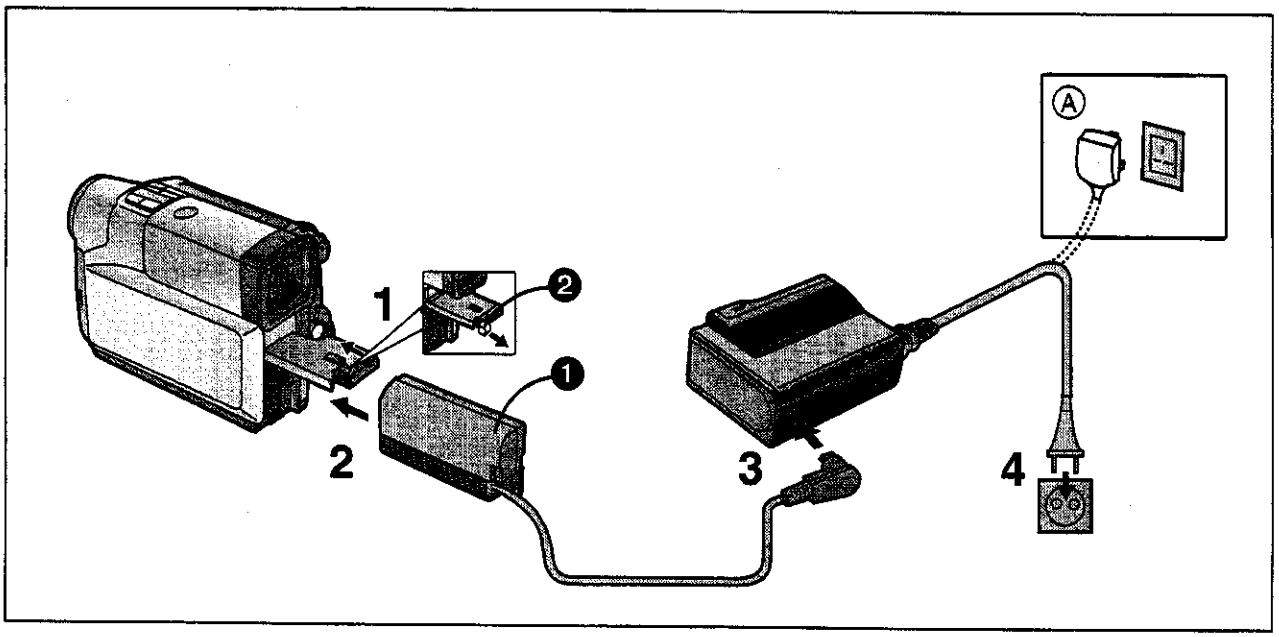
㉘ **多用端子**[MULTI](➜54·102)

㉙ **鏡頭蓋**(➜56·82)

㉚ **錄影燈**(➜30)

㉛ **白色平衡感應器**(➜150)/**遙控感應器**(➜100)

㉜ **麥克風**(內藏，立體聲)



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The 3 Types of Power Supplies

1) AC Adaptor (supplied) to supply power from an AC mains socket
2) Car Battery Charger (optional) to supply power from a Cigarette Lighter Socket
3) Battery (supplied) (➔ 18)

■ Supplying Power from an AC Mains Socket

1 Slide the [▲BATTERY] Lever upward to open the Battery Compartment Cover.

2 Insert the battery-shaped connector of the DC Input Cable ❶ into the Movie Camera.

Pull back the Cover for DC Input Cable Slot ❷ and lift it. Pass the DC Input Cable through this slot and close the Battery Compartment Cover.

3 Connect the other end of the DC Input Cable to the AC Adaptor.

4 Connect the AC Mains Cable to an AC mains socket.

Ⓐ: Hong Kong only

- Before disconnecting the AC Mains Cable, set the [POWER ON/OFF] Switch to [OFF].
- **If you use the Movie Camera for a long time, it becomes warm. However, this is normal.**

■ Supplying Power from the Cigarette Lighter Socket in a Car

You can use the optional Car Battery Charger VW-KBD1E to supply the Movie Camera with power from the Cigarette Lighter Socket in a car.
In addition, you can also use it to charge the Movie Camera's Battery.

- **After use, be sure to disconnect the Car Battery Charger from the Cigarette Lighter Socket.**
- Be sure to start the car engine before you connect the Car Battery Charger, otherwise the fuse may blow.

中文

三種電源

1) 交流轉接器 (附件) 由交流主插座供電。
2) 汽車電池充電器 (選購品) 由點火器插座供電。
3) 電池 (附件) (➔18)

■ 由交流主插座供電

1 上撥 [▲BATTERY] 柄，打開電池室蓋。

2 將直流輸入纜線❶的電池形連接端，插入攝錄影機。

將直流輸入纜線孔❷的蓋子向後拉，然後上抬。將直流輸入纜線穿過該孔，關閉電池室蓋。

3 將直流輸入纜線的另一端連接至交流轉接器。

4 將交流主纜線連接至交流主插座。

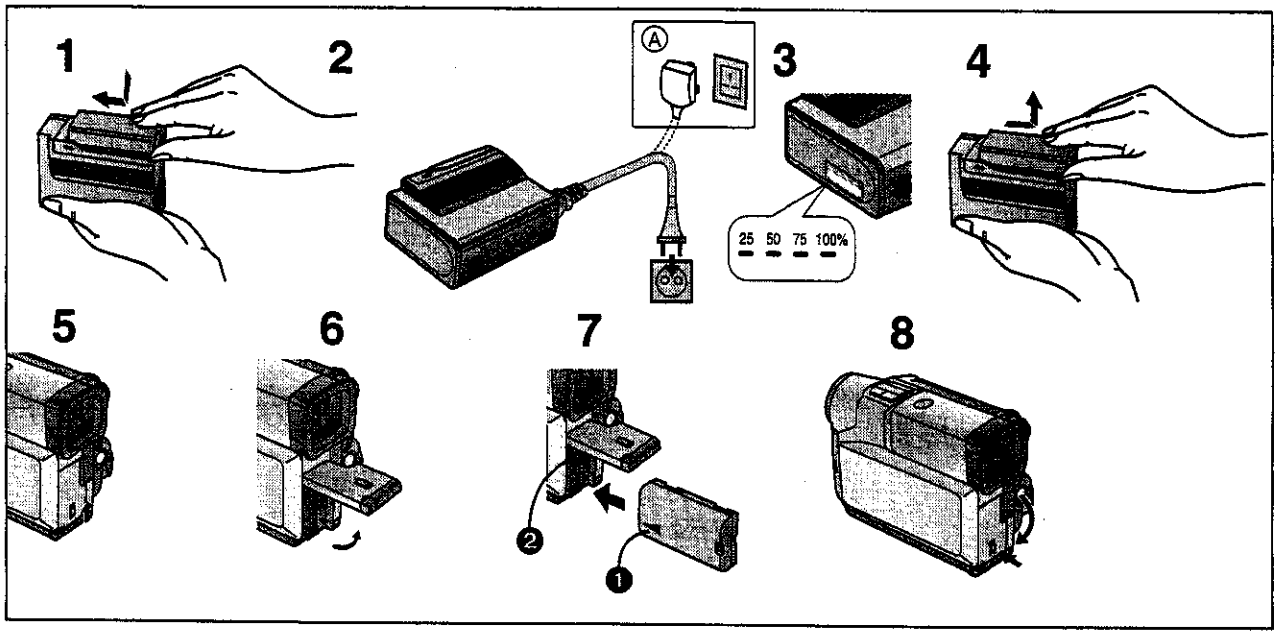
Ⓐ: 僅限於香港

- 拔掉交流主纜線之前，應將[POWERON/OFF]開關設置在[OFF]。
- 若使用了很長時間，攝錄影機將會變熱。然而，這屬正常現象。

■ 由汽車點火器插座供電

您可使用選購汽車電池充電器VW-KBD1E，靠汽車上的點火器插孔給攝錄影機供電。
另外，也可用其給攝錄影機的電池充電。

- 使用之後，須從點火器插孔上拔掉汽車電池充電器。
- 在連接汽車電池充電器之前，須起動汽車發動機，否則熔斷器可能會燒壞。



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■ Supplying Power with the Battery

The Battery was only minimally charged before shipping. Therefore, fully charge it before you use it for the first time.

1 Place the Battery on the AC Adaptor as shown above and slide it horizontally until it stops.

2 Connect the AC Mains Cable to the AC Adaptor and an AC mains socket.
Ⓐ: Hong Kong only

3 When all four Charge Lamps on the AC Adaptor are lit, charging is finished.

4 Remove the Battery by sliding it in the opposite direction of Step 1 above.
●Also disconnect the AC Mains Cable.

5 Slide the [▲BATTERY] Lever.

6 Open the Battery Compartment Cover.

7 Insert the Battery with ❶ pointing inside.

8 Close the Battery Compartment Cover so that it locks with a click.

Removing the Battery

Open the Battery Compartment Cover and push the Battery Eject Lever ❷.

- Hold your hand over the Battery Compartment Cover to prevent the Battery from dropping.
- Before removing the Battery, set the [POWER ON/OFF] Switch to [OFF].

Caution

Be sure to insert the Battery with the [▲] mark pointing into the Movie Camera. If you insert it with the mark

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■ 用電池供電

出廠前，僅得到最低限度的充電。所以，在第一次使用前，應給電池充足電。

1 如上圖所示，將電池放在交流轉接器上，然後水平滑動，直至其停止為止。

2 將交流主纜線連接至交流轉接器和交流主插座上。
Ⓐ: 僅限於香港

3 當交流轉接器上所有的四個 充電燈都亮起時，說明充電已經結束。

4 依上述步驟 1 的相反方向，滑動電池，將其取出。
● 也可拔掉交流主纜線。

5 滑動 [▲BATTERY] (電池)柄。

6 打開電池室蓋。

7 插入電池，使❶朝內。

8 關閉電池室蓋，使其咔嗒一聲鎖定到位。

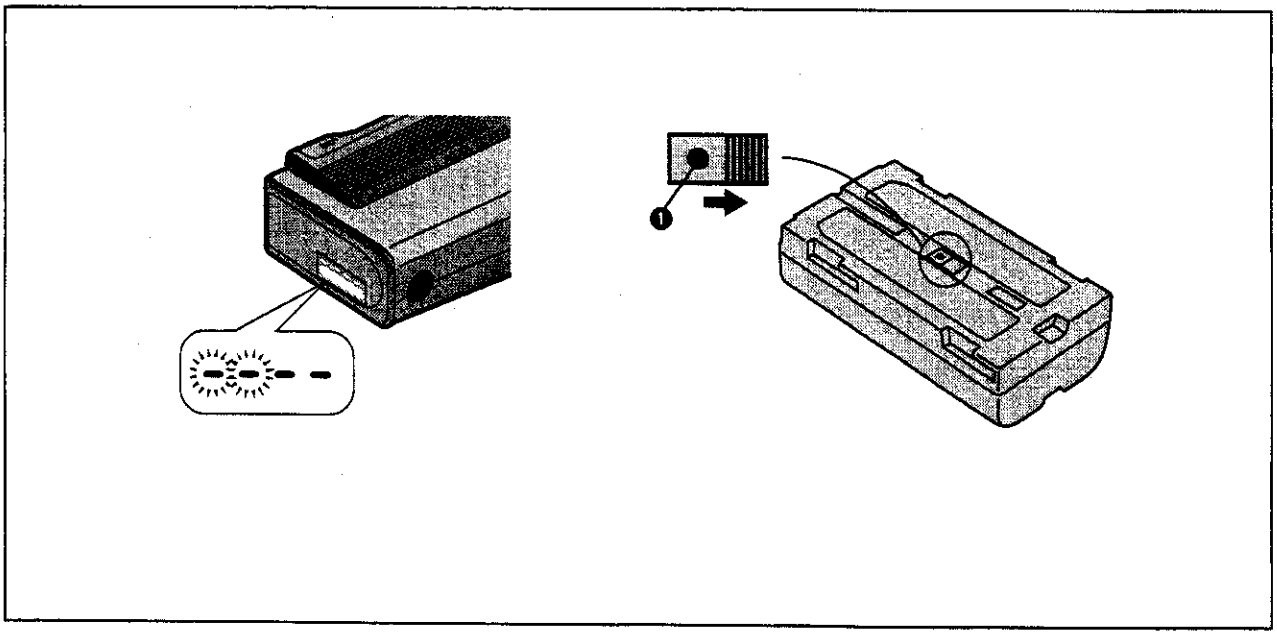
取出電池時

打開電池室蓋，按電池排出柄❷。

- 用手蓋住電池室蓋，以免電池掉落。
- 取出電池之前，請將[POWER ON/OFF]開關設定在[OFF]。

提醒注意

插入電池時，須將[▲]標誌朝向攝錄影機。若插入電池時，此標誌朝外，則會損壞攝錄影機。



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Charging Time and Maximum Time for Continuous Recording

Battery No.	Charging Time	Max. Continuous Recording Time
Supplied	80 min.	100 min.
VW-VBD1	80 min.	100 min.
VW-VBD2	160 min.	180 min.
CGR-B/814	320 min.	420 min.

(The times shown in the above chart are approximations.)
The times listed above for your information indicate the duration of recording performed at an ambient temperature of 20°C and 60% relative humidity. The charging time may be longer when you charge the Battery at higher or lower temperature.

- ♦ During use and charging, the Battery becomes warm. The Movie Camera, too, becomes warm during use.
- ♦ When you repeatedly stop and restart recording, the recording time per Battery may be shorter than listed above.
- ● If you do not use the Battery for a long time, please read the Precautions for Storage (➔ 140).

When the Charge Lamps Flash

When the internal temperature of the Battery or the ambient temperature is extremely high or low, the Charge Lamps on the AC Adaptor flash.

When the Charge Lamps flash slowly
The Battery is being charged, but charging takes longer than normally.

When the Charge Lamps flash in groups of 2
Charging is not possible. When the temperature becomes appropriate for charging, the Charge Lamps stop flashing and charging starts.

Using the Charge Confirmation Marker

You can use this marker to easily distinguish between charged and discharged Batteries.
For example, slide the knob so that the red dot (●) ❶ is visible after the charging is completed.

中文

充電時間和最長連續拍攝時間

電池型號	充電時間	最長連續拍攝時間
附件	80分鐘	100分鐘
VW-VBD1	80分鐘	100分鐘
VW-VBD2	160分鐘	180分鐘
CGR-B/814	320分鐘	420分鐘

(上表所列時間為近似值。)
上列供您參考的時間指在環境溫度20℃和相對濕度60%的條件下，進行連續拍攝的時間。當您在更高或更低的溫度下進行電池充電時，充電時間可能會延長。

- ♦ 在使用和充電中，電池可能會變熱。使用中，攝錄影機也會變熱。
- ♦ 當您不斷停止和重新開始拍攝時，每個電池的拍攝時間可能會短於上表所列。
- ● 如果您打算長期不用電池時，請閱讀存放時的注意事項(➔ 140)。

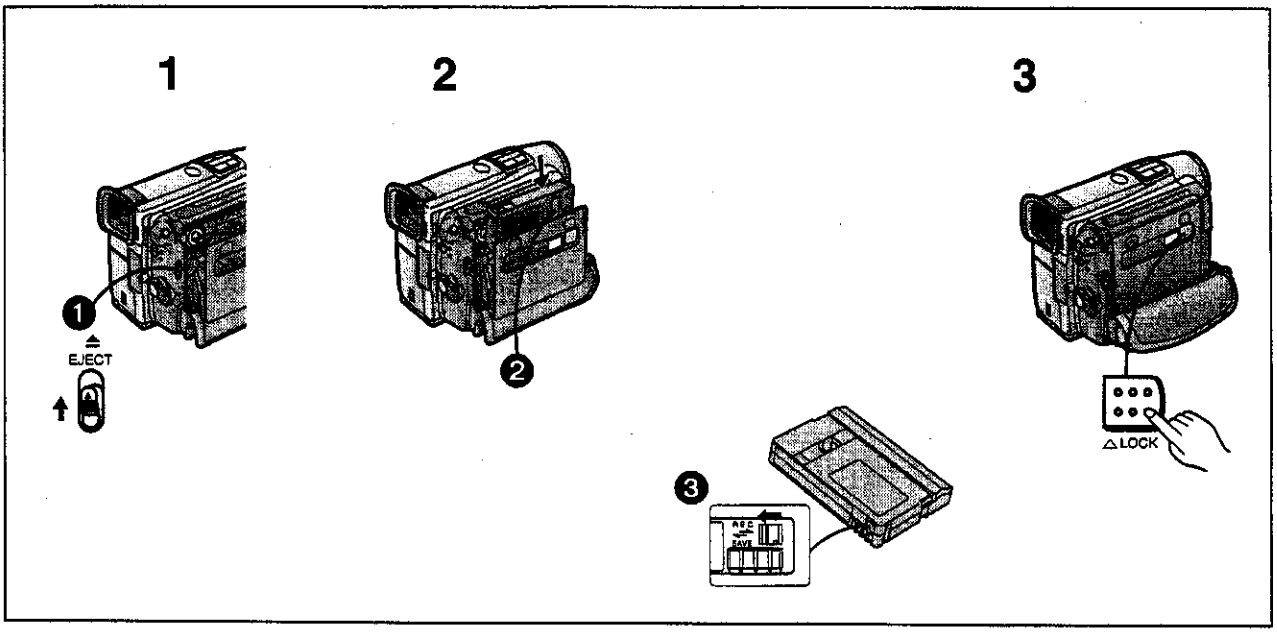
當充電燈閃爍時

當電池內部或環境的溫度極高和極低時，交流轉接器上的[Charge] (充電) 燈會閃爍。

當充電燈慢慢閃爍時:
電池正在充電中，但充電時間長於平常。
當充電燈分兩組閃爍時:
不能進行充電。當溫度變得可以充電時，充電燈將停止閃爍，並開始充電。

充電確認標記的利用

利用此標記，可簡單地區別已充電和已放電的電池。
例如，完成充電後，滑動該鈕，使紅點 (●) ❶ 可見。



ENGLISH

Inserting the Cassette

1 Slide the [▲ EJECT] Lever ❶ upward to open the Cassette Compartment.

2 Insert the cassette.
Insert the cassette with its window in position ❷.

3 Close the Cassette Compartment and press the [△LOCK] Button to lock the Cassette Compartment.

- If the Movie Camera is supplied with power, Step 1 can be operated without turning on the Movie Camera.
- ♦ When opening or closing the Cassette Compartment, push down the Grip Belt so that it does not obstruct the opening and closing of the Cassette Compartment. Otherwise the Grip Belt may prevent the Cassette Compartment from opening completely, or it may get caught under the Cassette Compartment Cover and prevent it from closing properly.
- ♦ When inserting the cassette, make sure it faces in the right direction and then push in straight down until it stops.
- When you insert a cassette onto which you have recorded before, use the Camera Search Function (➔ 56) to search for the position from which you want to continue recording.
- When you insert a new cassette, rewind the tape to the beginning before starting to record.

Preventing Accidental Erasure of Recordings
Opening the cassette's erasure prevention slider ❸ (sliding it in the direction of the [SAVE] arrow) prevents recording. To record again, close the erasure prevention slider (slide it in the direction of the [REC] arrow).

中文

插入錄影帶

1 上撥 [▲EJECT] (排出) 柄 ❶，打開磁帶室蓋。

2 插入錄影帶。
插入錄影帶時，請將其窗口處於位置 ❷。

3 關閉磁帶室蓋，然後按 [△LOCK] (鎖定) 鈕，將磁帶室蓋鎖緊。

- 如果攝錄影機已得到供電時，不用打開攝錄影機，便可操作步驟 1。
- ♦ 打開或關閉磁帶室蓋時，請下按扣抓皮帶，不讓其妨礙磁帶室蓋的打開和關閉。否則，扣抓皮帶可能會阻礙磁帶室蓋完全打開，或夾在磁帶室蓋之下，並防止其正確地關閉。
- ♦ 插入錄影帶時，必須使其面朝正確方向，然後直接下按，直至其停止為止。
- 插入以前已拍攝的錄影帶時，利用攝錄影機尋影功能 (➔ 56)，可尋影您打算繼續進行拍攝的位置。
- 插入新錄影帶時，請在開始拍攝之前，將錄影帶倒轉到頭。

防止意外抹消拍攝內容時
請打開錄影帶上的保險滑頭 ❸ (依 [SAVE] 箭頭所示，撥動滑頭)，以保護拍攝內容。想重新進行拍攝時，請關閉保險滑頭 (依 [REC] 箭頭所示，撥動滑頭)。

ENGLISH

■ LP Mode

The desired recording speed can be selected with [REC SPEED] on the [MENU (OTHERS)] Menu. (➔ 118-122)

If you select the [LP] Mode, the possible recording time is 1.5 times as long as in the SP Mode.
Recording in the LP mode does not deteriorate the picture quality. However, the playback picture may contain mosaic-like patterns and functions may be restricted.

- In the following cases, mosaic-like patterns may appear in the playback picture or the picture may not be played back correctly.
  - When a cassette recorded in the LP Mode on this Movie Camera is played back on other digital video equipment.
  - When a cassette recorded in the LP Mode on other digital video equipment is played back on this Movie Camera.
  - When a cassette recorded in the LP Mode on this Movie Camera is played back on digital video equipment not featuring the LP Mode.
  - In the Slow Motion or Still Advance Playback Mode. (➔ 48, 50)
  - When using the Camera Search Function. (➔ 56)
- As the recording track width in the LP Mode is smaller than the head width, recording new sound onto an already recorded cassette (audio dubbing) (➔ 88) is impossible.

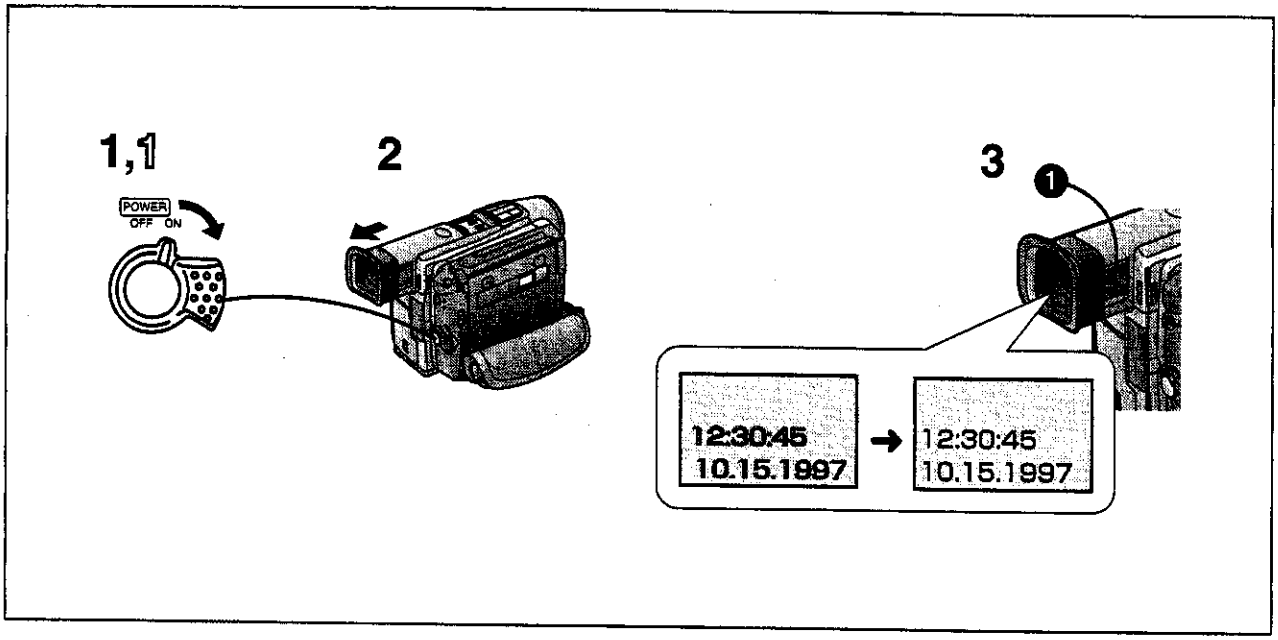
中文

■ LP狀態

用 [MENU (OTHERS)] 菜單上的 [REC SPEED] (錄影速度) 項，可選擇需要的拍攝速度。(➔ 118-122)

如果您選擇了[LP]狀態時，可拍攝時間將為SP狀態的1.5倍。
以LP狀態拍攝時，將不會降低畫質。然而，播放的圖像可能含有斑紋狀雜波，且功能可能會受到限制。

- 在下列情況下，在播放的圖像中可能會出現斑紋狀雜波，或圖像無法得到正確地播放。
  - 當在其它數位影像設備上播放在LP狀態下、用該攝錄影機拍攝的錄影帶時;
  - 當在該攝錄影機上播放在LP狀態下、用其它數位影像設備錄製的錄影帶時;
  - 當在不具備LP狀態的其它數位影像設備上播放在LP狀態下、用該攝錄影機拍攝的錄影帶時;
  - 在慢動作或靜止步進播放狀態時; (➔48, 50)
  - 當使用攝錄影機尋影功能時。(➔ 56)
- 由於LP狀態下的拍攝磁跡寬度比磁頭寬度窄，所以，將無法在已拍攝的錄影帶上錄製新的聲音 (音頻拷貝) (➔ 88)。



ENGLISH

Using the Finder

Before using the Finder, adjust it to your eyesight so that the indications in the Finder are clear and easy to read.

1 Set the [POWER ON/OFF] Switch to [ON].

2 Slide the Finder backward.

The angle of the Finder can be adjusted upward. However, be sure to slide it backward until it stops, before turning the Finder upward.

3 Adjust by turning the Eyepiece Corrector Dial ❶.

You can adjust the brightness of the Finder on the [MENU (OTHERS)] Menu. (➔ 118-122, 130)

中文

使用電子尋像器

使用電子尋像器之前，請將其調節至您的視力，以使電子尋像器中的指示清晰易辨。

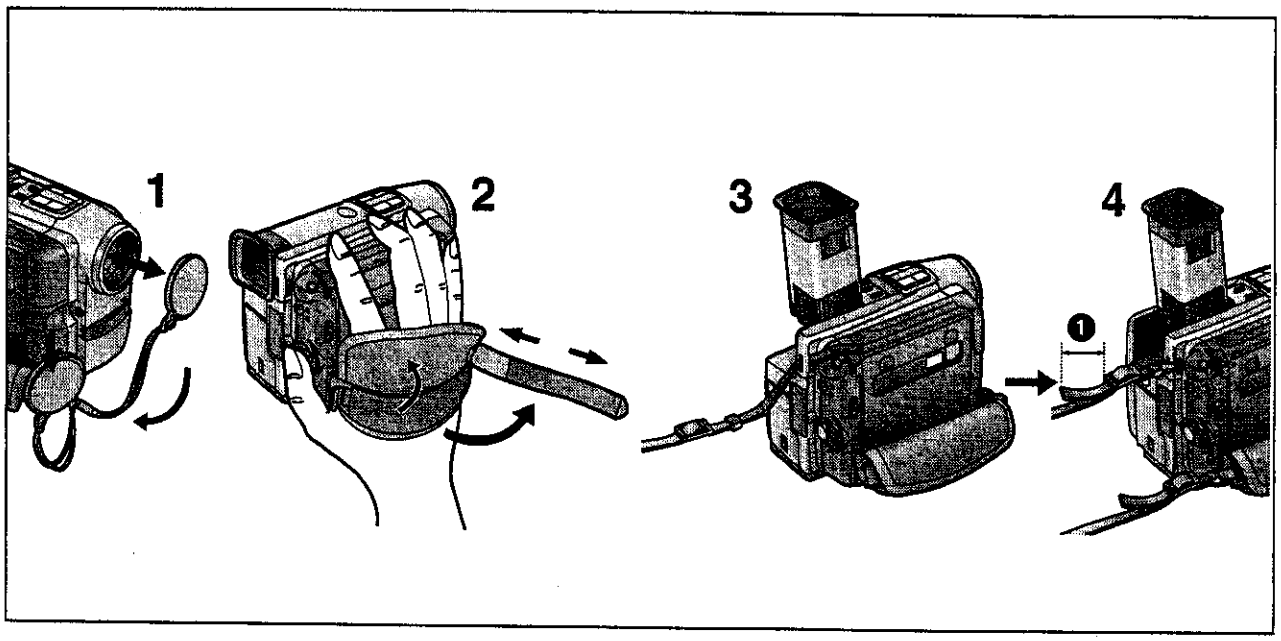
1 將 [POWER ON/OFF] 開關設置在 [ON]。

2 後滑電子尋像器。

可將電子尋像器的角度向上調節。然而，在向上轉動電子尋像器之前，須將其後滑到底。

3 轉動目鏡校正環 ❶ 進行調節。

您可在[MENU (OTHERS)]菜單上，調節電子尋像器的亮度。(➔ 118~122，130)



ENGLISH

Handling the Lens Cap

Before you start recording, remove the lens cap.

1 You can hook the removed Lens Cap onto the Grip Belt.
When not actually recording, attach the Lens Cap to the Lens to protect it.

Adjusting the Grip Belt

You can adjust the Grip Belt to the size of your hand.

2 Open the Grip Belt Cover and adjust the length of the Grip Belt.

Attaching the Shoulder Strap

Before you go recording outside, we recommend that you attach the Shoulder Strap to prevent the Movie Camera from dropping accidentally.

3 Pull one end of the Shoulder Strap through one of the Shoulder Strap Holders on the Movie Camera.

4 Fold the end of the Shoulder Strap back and pull it through the Shoulder Strap Length Adjuster.
Pull it out more than 2 cm ❶ from the Shoulder Strap Length Adjuster so that it cannot slip off.

中文

鏡頭蓋處理

開始拍攝之前，請取下鏡頭蓋。

1 您可將取下的鏡頭蓋掛在扣抓皮帶之上。
不實際拍攝時，請將鏡頭蓋裝在鏡頭上，以保護鏡頭。

扣抓皮帶調整

您可調整扣抓皮帶，使其與自己手的尺寸保持一致。

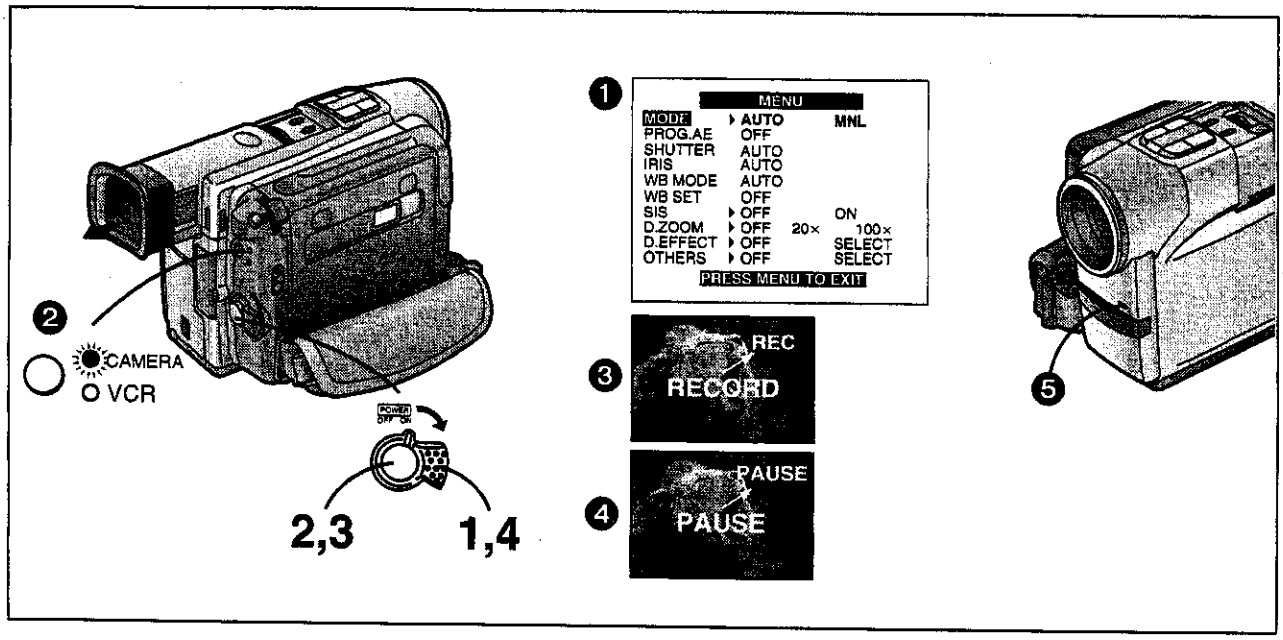
2 打開扣抓皮帶蓋，調整扣抓皮帶的長度。

安裝肩用背帶

在您外出拍攝之前，建議您裝上肩用背帶，以防攝錄影機意外失落。

3 將肩用背帶的一端，穿過攝錄影機的肩用背帶環的一端之上。

4 將肩用背帶的一端反折起來，然後將其穿過肩用背帶長度調節器。
將其拉出肩用背帶長度調節器之外約 2 釐米 ❶，使其不至於滑脫。



ENGLISH

Recording

When [MODE] on the Menu has been set to [AUTO] ❶ (➜ 118-120), you can simply turn on the Movie Camera and press the Start/Stop Button to start recording, and the focus and white balance are adjusted automatically.

- Depending on the light source and recording situation, correct automatic focusing and white balance adjustment may not be possible. In such cases, adjust them manually.
  (Focus: ➜ 34) (White Balance: ➜ 80, 82)

1 Set the [POWER ON/OFF] Switch to [ON].
The [CAMERA] Lamp lights. ❷

2 Press the Start/Stop Button.
Recording starts.
The [RECORD] Indication appears briefly and then changes to [REC]. ❸

3 To pause recording: Press the Start/Stop Button again.
The [PAUSE] Indication appears. ❹

4 To finish recording: Set the [POWER ON/OFF] Switch to [OFF].

- **If you leave the Movie Camera in the Recording Pause Mode for more than 6 minutes, it automatically switches off to protect the tape and to conserve battery power. To resume recording from this condition, set the [POWER ON/OFF] Switch to [OFF] and then to [ON] again.**

Recording Lamp

The Recording Lamp lights ❺ during recording to indicate that recording is being performed.
If you select [OTHERS] on the Menu and set [REC LAMP] to [OFF], the Recording Lamp does not light.
(➜ 118-122)

中文

拍攝

當菜單上的[MODE] (狀態) 被設置在[AUTO] (自動) ❶ 時 (➜ 118，120)，便可簡單地打開攝錄影機。按啟動/停止鈕，即可開始拍攝。聚焦和白色平衡將得到自動調節。

- 根據光源和拍攝條件，有時可能無法正確地進行自動聚焦和白色平衡調節。在此情況下，請手動進行調節。
  (聚焦: ➜ 34) (白色平衡: ➜ 80，82)

1 將[POWER ON/OFF]開關設置在[ON]。
[CAMERA] (攝錄影機) 燈亮起。❷

2 按啟動/停止鈕。
即開始拍攝。
[RECORD]指示會短暫出現，然後變為[REC]。❸

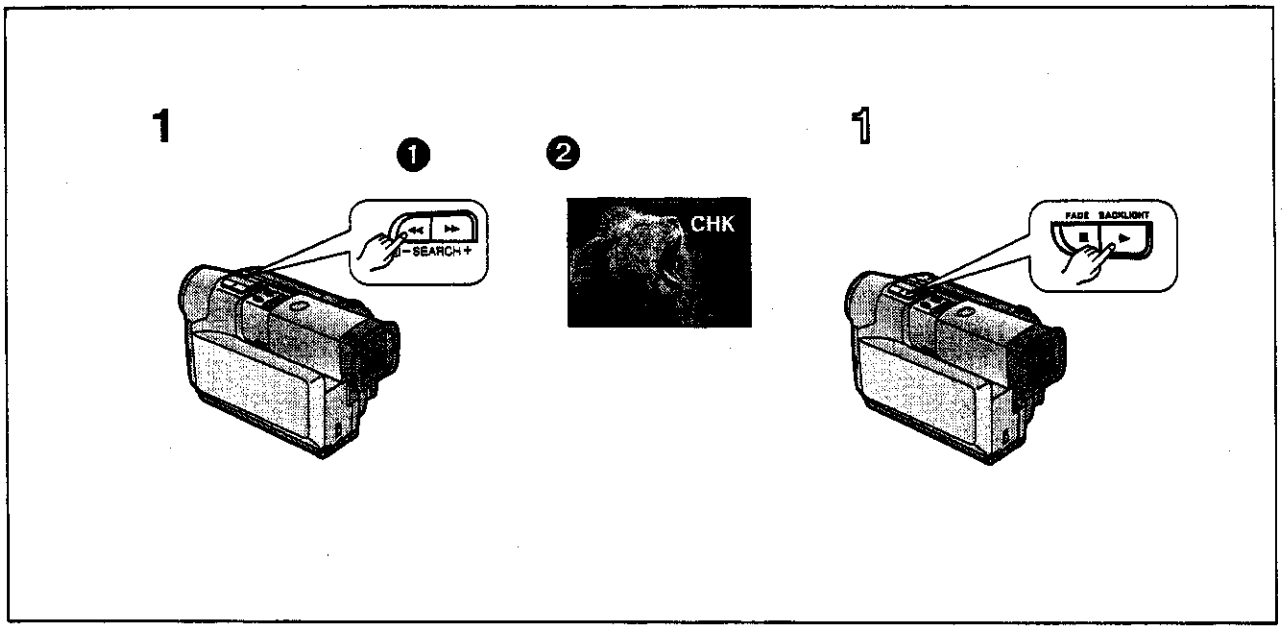
3 暫停拍攝時:
再次按啟動/停止鈕。
會出現[PAUSE] (暫停) 指示。❹

4 結束拍攝時:
將 [POWER ON/OFF] 開關設置在[OFF]。

- **如果您讓攝錄影機處於拍攝暫停狀態超過 6 分鐘時，本機將自動關閉，以保護錄影帶和節省電池電源。從此狀態下恢復拍攝時，請將 [POWER ON/OFF] 開關設置在 [OFF]，然後再次設置在[ON]。**

錄影燈

在拍攝中，錄影燈會亮起 ❺，表示正在進行拍攝。
如果您選擇了菜單上的[OTHERS](其它)，並將[REC LAMP] (錄影燈) 設定為[OFF]時，錄影燈則不會亮起。
(➜ 118~122)



ENGLISH

Checking If the Picture Is Recorded
(Recording Check)

To play back the final few seconds of the last recorded scene in the Recording Pause Mode.

1 Press the Reverse Search Button [◀◀] ❶ briefly in the Recording Pause Mode.

The [CHK] Indication appears ❷.
After checking, the Movie Camera returns to the Recording Pause Mode.

- To check the last recorded scene, use the same mode as the one you used for recording (SP or LP). If you use the other mode, the playback picture is distorted.

Recording Backlit Scenes
(Backlight Compensation)

To prevent the backlit subject from being recorded very dark.
(Backlight means that the light falls on the subject from behind.)

1 Keep the Backlight Button [▶] pressed.

The backlight is being compensated as long as you keep the Button pressed, and the subject is recorded more brightly.
(The picture brightens up as a whole.)

Returning to Normal Recording
Release the Backlight Button [▶].

中文

檢查已拍攝的圖像（拍攝檢查）

可在拍攝暫停狀態下，播放上次拍攝的最後幾秒鐘場景。

1 在拍攝暫停狀態下，輕按反向尋影鈕[◀◀] ❶。

將出現[CHK] (檢查) 指示 ❷。
檢查之後，攝錄影機將恢復拍攝暫停狀態。

- 要檢查最後拍攝的場景時，請使用與拍攝時所用相同的狀態 (SP或LP)。若使用了其它狀態時，播放的圖像將會失真。

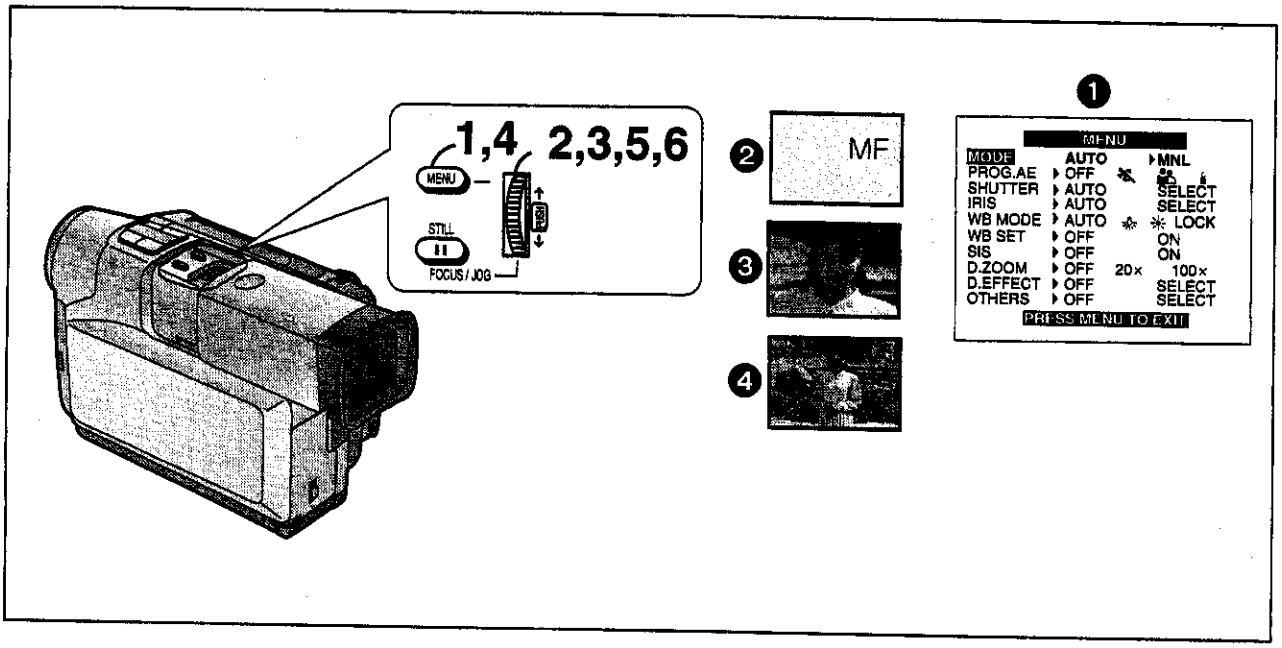
拍攝逆光場景（逆光補償）

可防止逆光目標物被拍攝的太暗。
(逆光意指從背後照射在目標物之上的光線。)

1 按住逆光鈕[▶]。

只要您按住該鈕，逆光將得到補償，目標物將被拍得更亮。
(圖像會整體變亮。)

恢復普通拍攝時
鬆開逆光鈕[▶]。



ENGLISH

Manually Focusing on the Subject
(Manual Focus)

To adjust the focus manually for subjects and recording situations for which automatic focusing is not precise.

1 Press the [MENU] Button.
The Menu appears.

2 Turn the [PUSH] Dial to select [MODE].

3 Press the [PUSH] Dial to select [MNL] ❶.

4 Press the [MENU] Button to exit the Menu.

5 Keep the [PUSH] Dial pressed until the [MF] Indication ❷ appears.

6 Turn the [PUSH] Dial until the subject is sharp.

Changing Back to Automatic Focusing
Keep the [PUSH] Dial pressed until the [MF] Indication disappears.

Hint for Manual Focus Adjustment
♦ If you adjust the focus in the wide-angle setting, the subject may go out of focus when it is enlarged. Therefore, enlarge the subject ❸ before you adjust the focus, so that the picture remains focused ❹.

中文

目標物的手動聚焦（手動聚焦）

對於不能精確地進行自動聚焦的目標物和拍攝狀況，可手動調節聚焦。

1 按 [MENU]（菜單）鈕。
即出現菜單。

2 轉動 [PUSH]（下按）環，選擇[MODE]（狀態）。

3 按 [PUSH]環，選擇[MNL]（手動）❶。

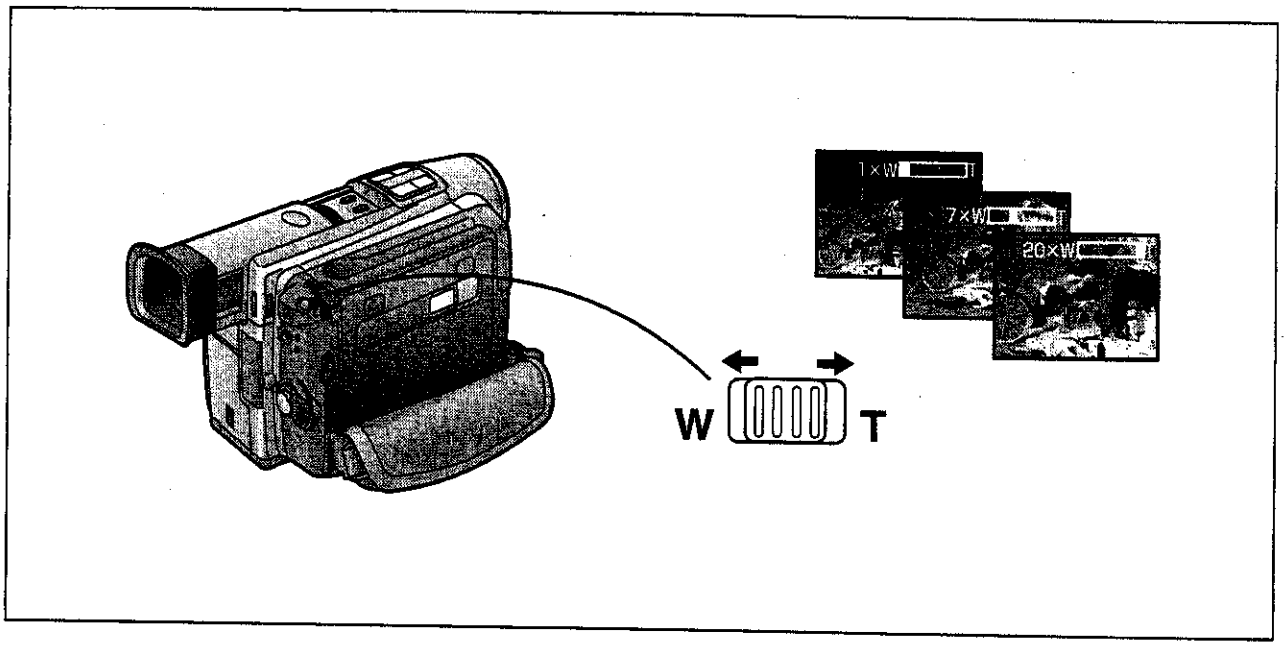
4 按 [MENU]鈕，退出菜單。

5 按住 [PUSH] 環，直至出現[MF]（手動聚焦）指示❷。

6 轉動 [PUSH] 環，直至目標物清晰為止。

變回自動聚焦時
按住[PUSH]環，直至[MF]指示消失為止。

手動聚焦調節的提示
♦ 調節廣角設定的聚焦時，對於放大的目標物，可能無法進行圖像聚焦。所以，在您調節聚焦之前，須放大目標物❸，使圖像永保聚焦狀況❹。



ENGLISH

Enlarging Your Subject or Widening the Recording Angle
(Zooming In/Out)

Recording close-ups of your subjects and recording a wide-angle shots adds special effects to your videos.

1 To record a wider view (Zooming-out): Push the [W/T] Zoom Lever toward [W]. To enlarge your subject (Zooming-in): Push the [W/T] Zoom Lever toward [T].

- The Zoom Magnification Indication appears for a few seconds.
- The farther you push the [W/T] Zoom Lever toward [W] or [T], the faster the zooming speed becomes.
- ♦ During recording, the zooming speed is slower than during recording pause.

Enlarging Your Subjects Even More (Digital Zooming)

Selecting one of the settings for [D.ZOOM] on the Menu makes it possible to further enlarge the subject. (➔ 118, 120)

- **20×**:Digital zooming up to 20×.
- **100×**:Digital zooming up to 100×.
- Up to 10×, the zooming is done optically.
- ♦ The higher the Digital Zoom Magnification is, the lower is the picture quality.
- ♦ If you set [D. ZOOM] on the Menu to [20×] or [100×], the [D.ZOOM] Indication appears.

Recording Extra Close-up Shots of Small Subjects (Macro Close-up Function)

When the zoom magnification is 1×, the Movie Camera can focus on subjects down to a distance of approximately 25 mm between lens and subject. This allows recording very small subjects such as insects.

- ♦ When you have zoomed to the tele setting, precise focussing is only possible on subjects no closer than 1.2 metres.

中文

放大目標物或加寬拍攝角度
(拉近/拉遠)

拍攝拉近的目標物和廣角鏡頭，可為您的影像的增添特殊效果。

1 拍攝更廣的視角(拉遠)時：朝[W]方向按[W/T]變焦柄。放大目標物(拉近)時：朝[T]方向按[W/T]變焦柄。

- 變焦放大指示將出現幾秒鐘。
- 越用力朝[W]或[T]方向按[W/T]變焦柄，變焦速度將變得越快。
- ♦ 拍攝中，變焦速度將慢於拍攝暫停下的速度。

想更加放大目標物時(數位變焦)

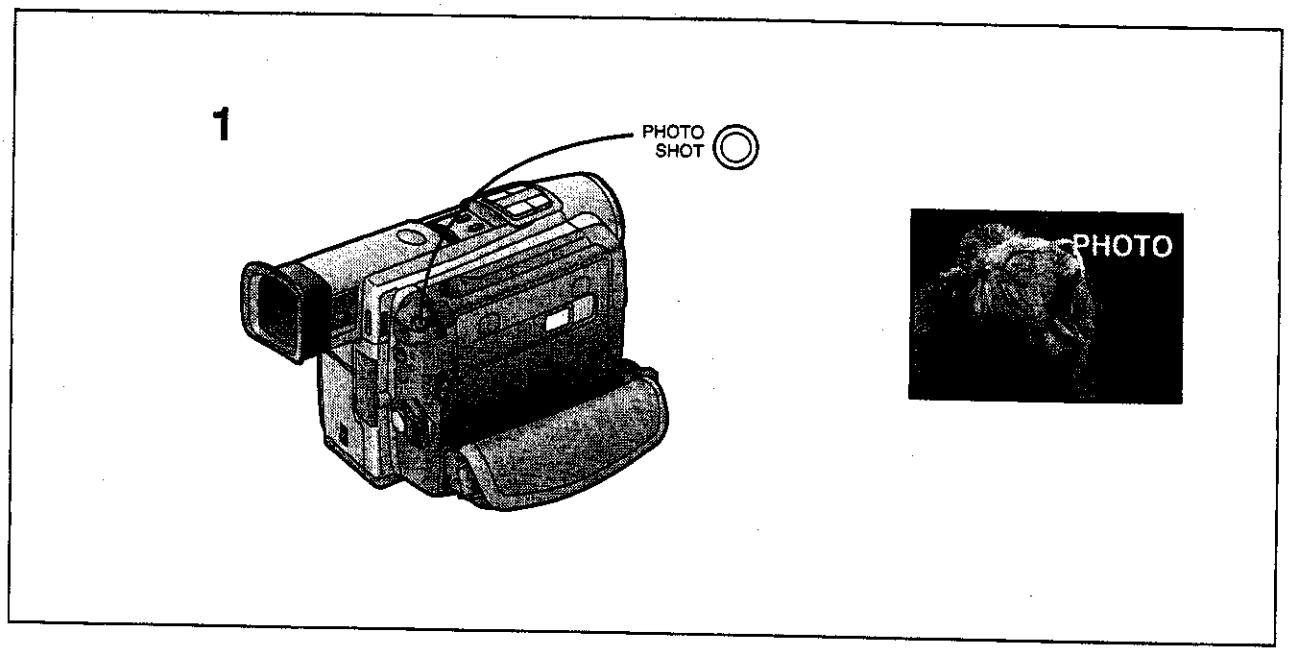
選擇菜單上[D.ZOOM](數位變焦)的設定值之一，可進一步放大目標物。(➔ 118，120)

- **20×**：可數位拉近至最大20倍。
- **100×**：可數位拉近至最大100倍。
- 進行光學變焦時，最大可達10倍。
- ♦ 數位變焦放大率越大，畫質將越差。
- ♦ 如果您將菜單上[D.ZOOM]設定為[20×]或[100×]時，會出現[D.ZOOM]指示。

小目標物的超拉近鏡頭拍攝(微距拉近功能)

當變焦放大率為1倍時，在鏡頭和目標物之間，攝錄影機能夠對目標物進行聚焦的距離將縮短為約25毫米。這樣便可拍攝昆蟲之類的極小目標物。

- ♦ 當您已經變焦為長焦設定時，只有離開目標物1.2公尺以上，才能進行精確地聚焦。



ENGLISH

Using the Movie Camera as a Still Camera (Photoshot)

With this function, you can record still pictures with sound for approximately 7 seconds each.
This function is convenient for example for pictures that you want to print on a Video Printer.

1 Press the [PHOTO SHOT] Button. (This function can be used during recording, too.)

The Movie Camera records a still picture for approximately 7 seconds and then switches over to the Recording Pause Mode.

- The image in the Finder also stands still.
  If you select [OTHERS] on the Menu and set [SHTR EFFECT] to [ON], the screen blinks briefly when you press the [PHOTO SHOT] Button.
- With the still pictures that you have recorded in the Photoshot Mode, you can do the following.
  - Index search (➜ 60)
    (However, searching for the picture(s) recorded at the beginning of the tape may not be possible.)
  - Automatic printing (➜ 112)
- ♦ If you select [OTHERS] on the Menu and set [SHTR EFFECT] to [ON], the visual shutter effect and the click sound are also recorded. (There is a slight delay between pressing the [PHOTO SHOT] Button and the actual start of recording.The visual shutter effect and click sound may occur with slight delay after recording of the still picture has started.)
- ♦ The picture quality deteriorates slightly.
- ♦ Using the Photoshot Function makes the Remaining Tape Time Indication disappear. Resuming the normal recording makes the Remaining Tape Time Indication appear again.

中文

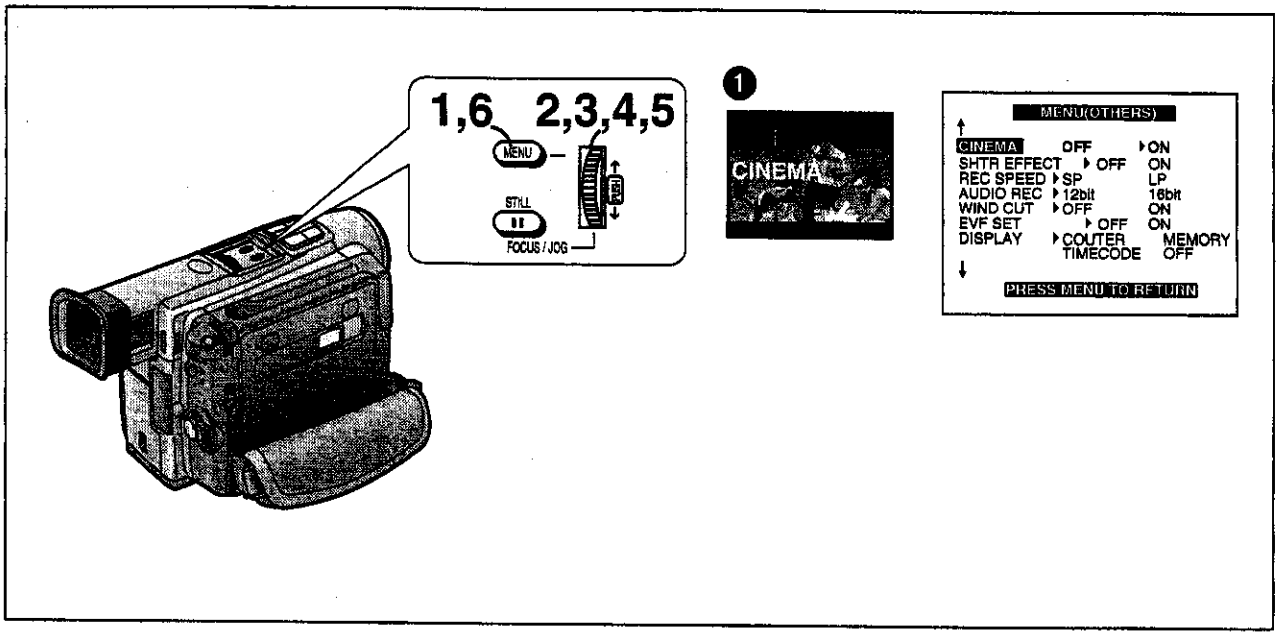
將攝錄影機用作靜畫攝錄影機 (拍照)

使用該功能，可拍攝每幀約7秒鐘，且帶有配音的靜止圖像。
該功能很便於拍攝打算在影像打印機上進行打印的圖像等。

1 按[PHOTO SHOT](拍照)鈕(拍攝中也可使用該功能)。

攝錄影機將拍攝約7秒鐘的靜止圖像，然後切換至拍攝暫停狀態。

- 電子尋像器中的圖像也會靜止。
  如果您選擇了菜單上的[OTHERS](其它)，並將[SHTR EFFECT]設置在[ON]。那麼當您按[PHOTO SHOP]鈕時，屏幕將會短暫地閃爍。
- 利用在拍照狀態下拍攝的靜止圖像，可進行下列事項:
  - 索引尋影。(➜ 60)
    (然而，不能進行錄影帶開頭拍攝圖像的尋影。)
  - 自動打印。(➜ 112)
- ♦ 如果您選擇了菜單上的[OTHERS]，並將[SHTR EFFECT]設置在[ON]時，也將拍攝視覺快門效果和咔嗒聲(按[PHOTO SHOT]鈕和實際開始拍攝之間稍微有些延遲)。在開始拍攝靜止圖像後，可能會延遲一會兒才能看見視覺快門效果和發出咔嗒聲。)
- ♦ 畫質將稍微降低。
- ♦ 使用拍照功能時，將使剩餘磁帶時間指示消失。
  恢復普通拍攝時，將使剩餘磁帶時間指示再次出現。



ENGLISH

Recording in the Cinema Mode
(Cinema Mode)

This mode lets you record in the cinema-like wide-screen format.

1 Press the [MENU] Button.
The Menu appears.

2 Turn the the [PUSH] Dial to select [OTHERS].

3 Press the the [PUSH] Dial to select [SELECT].
The [MENU (OTHERS)] Menu appears.

4 Turn the [PUSH] Dial to select [CINEMA].

5 Press the [PUSH] Dial to select [ON].

6 Press the [MENU] Button twice to exit the Menu.

- In the Cinema Mode, black bars appear at the top and bottom of the Finder screen. ❶

Cancelling the Cinema Mode
Set [CINEMA] on the [MENU (OTHERS)] Menu to [OFF].

中文

用電影狀態拍攝（電影狀態）

該狀態可讓您用電影一般的寬屏幕格式進行拍攝。

1 按 [MENU]（菜單）鈕。
即出現菜單。

2 轉動 [PUSH]（下按）環，選擇 [OTHERS]（其它）。

3 按 [PUSH] 環，選擇 [SELECT]（選擇）。
即出現[MENU (OTHERS)]菜單。

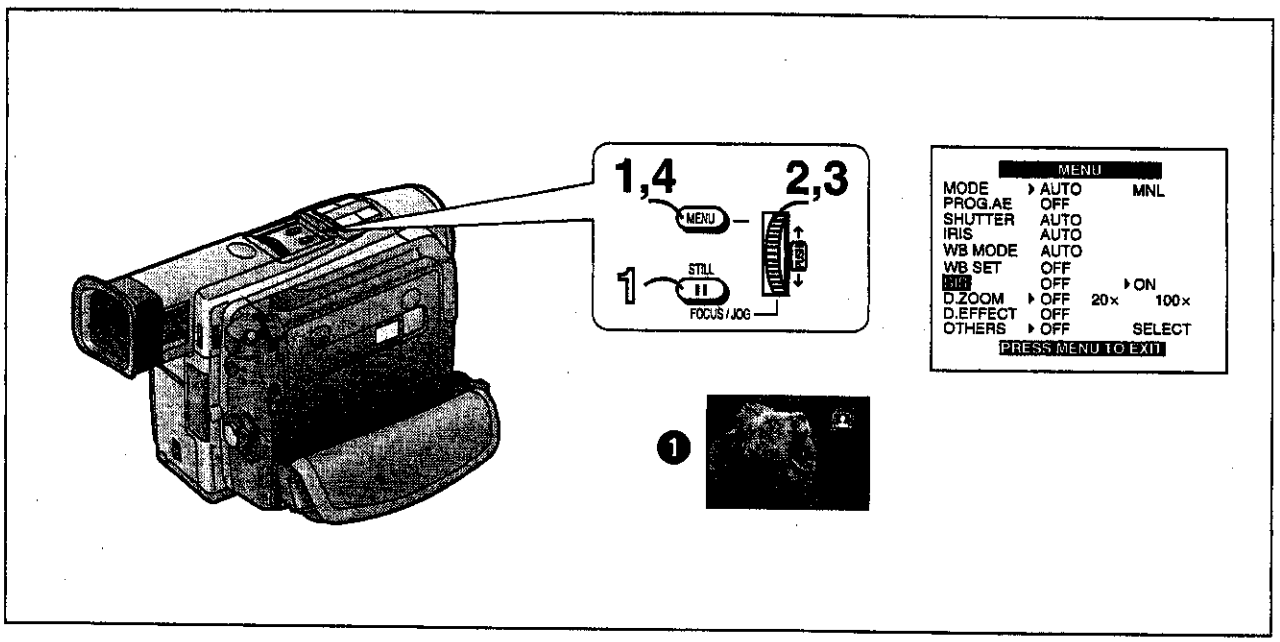
4 轉動 [PUSH] 環，選擇 [CINEMA]（電影）。

5 按 [PUSH] 環，選擇 [ON]。

6 按 [MENU] 鈕 2 次，退出菜單。

- 在電影狀態下，電子尋像器的上下頂邊會出現黑色條帶。❶

取消電影狀態時
將[MENU (OTHERS)]菜單上的[CINEMA]項設定在[OFF]。



ENGLISH

Recording with Minimised Camera Shake (Super Image Stabilizer)

In recording situations where shaking of the Movie Camera is likely to happen, for example when you have zoomed in on a distant subject or when you record while walking, you can use this function to stabilize the image.

- In case of very strong camera shake, it may not be possible to stabilize the picture.

1 Press the [MENU] Button.
The Menu appears.

2 Turn the [PUSH] Dial to select [SIS].

3 Press the [PUSH] Dial to select [ON].

4 Press the [MENU] Button to exit the Menu.
The [ ] Indication ❶ appears.

- In a dimly lit place, the Super Image Stabilizer Function may not work. In this case, the [ ] Indication flashes.
- Under fluorescent lamps, the picture brightness may fluctuate and the colours may be unnatural.
- The picture quality may deteriorate slightly.
- When you use a tripod, we recommend that you set [SIS] to [OFF].

Cancelling the Super Image Stabilizer Function
Set [SIS] on the Menu to [OFF].

Recording Still Pictures

You can record still pictures of any desired length together with sound either in the middle of a normal recording or from the Recording Pause Mode.

1 Press the Still Button[❚❚].

Cancelling the Still Recording Mode
Press the Still Button [❚❚] again.

中文

在攝錄影機晃動最小的情況下拍攝（超級畫面穩定）

在攝錄影機容易發生晃動，如您拉近遙遠的目標物或在行走進行攝影中等狀況下強行拍攝時，可利用該功能來穩定圖像。

- 當攝錄影機晃動非常嚴重時，有可能無法穩定畫面。

1 按 [MENU]（菜單）鈕。
即出現菜單。

2 轉動 [PUSH]（下按）環，選擇 [SIS]（超級畫面穩定）。

3 按 [PUSH] 選擇 [ON]。

4 按 [MENU] 鈕，退出菜單。
會出現 [ ] 指示 ❶。

- 在光線很暗之處，超級畫面穩定功能可能不會工作。在此情況下，[ ] 指示會閃爍。
- 在熒光燈下，圖像亮度可能會浮動不定，色彩也可能會不自然。
- 畫質將稍微降低。
- 當您使用三角架時，建議您將 [SIS] 設置在 [OFF]。

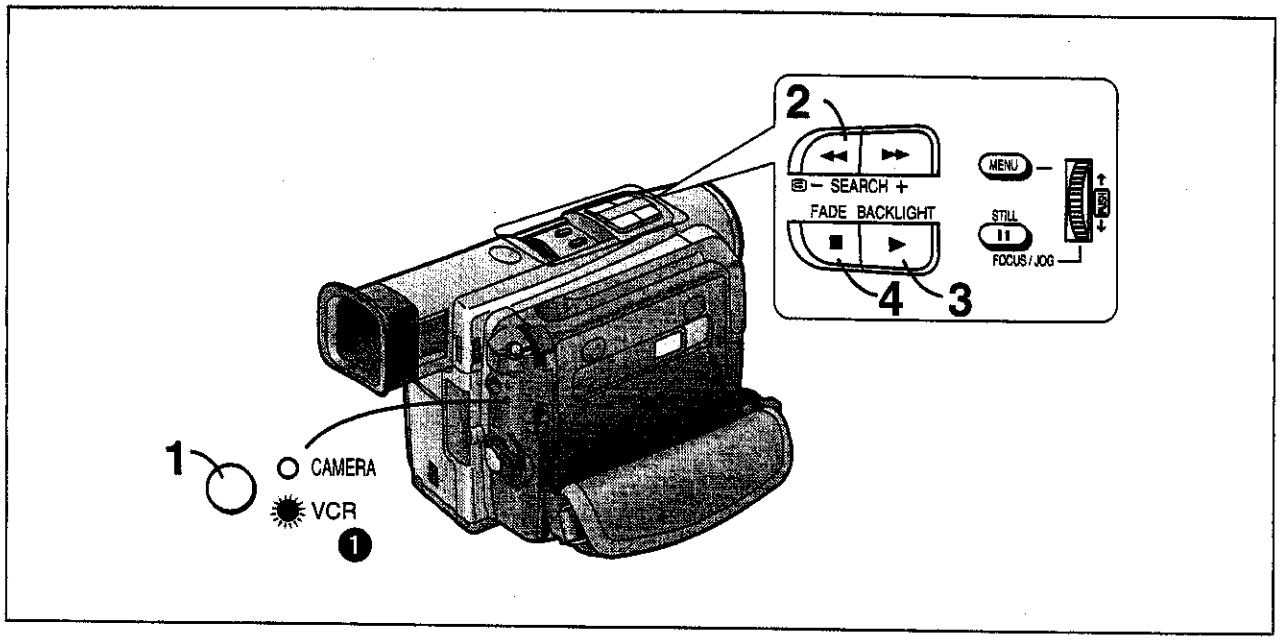
取消超級畫面穩定功能時
請將 [MENU] 上的 [SIS] 項，設置在 [OFF]。

拍攝靜止圖像（靜止）

您在普通拍攝中間或從拍攝暫停狀態下，拍攝任何需要長度、且帶有伴音的靜止圖像。

1 按靜止鈕 [❚❚]。

取消靜止拍攝狀態時
再次按靜止鈕 [❚❚]。



ENGLISH

Viewing the Just Recorded Scenes on the Movie Camera (Playback)

You can play back recorded scenes right after recording.

1 Press the [VCR/CAMERA] Button so that the [VCR] Lamp ❶ lights.

2 Press the Rewind Button [◀◀] to rewind the tape.
- Rewind the tape to the point where the recording started.
- If the tape reaches the beginning, rewinding automatically stops.

3 Press the Play Button [▶] to start playback.

4 To stop playback:
Press the Stop Button [■].

Making the Date/Time Indication Appear
This Movie Camera automatically records the date and time as part of the sub code (➔ 144).
To make the Date/Time Indication appear, set [DATE/TIME] on the Menu to the desired setting.

中文

在攝錄影機上觀看剛才拍攝的場景（放影）

您可在拍攝後立即觀看所拍場景。

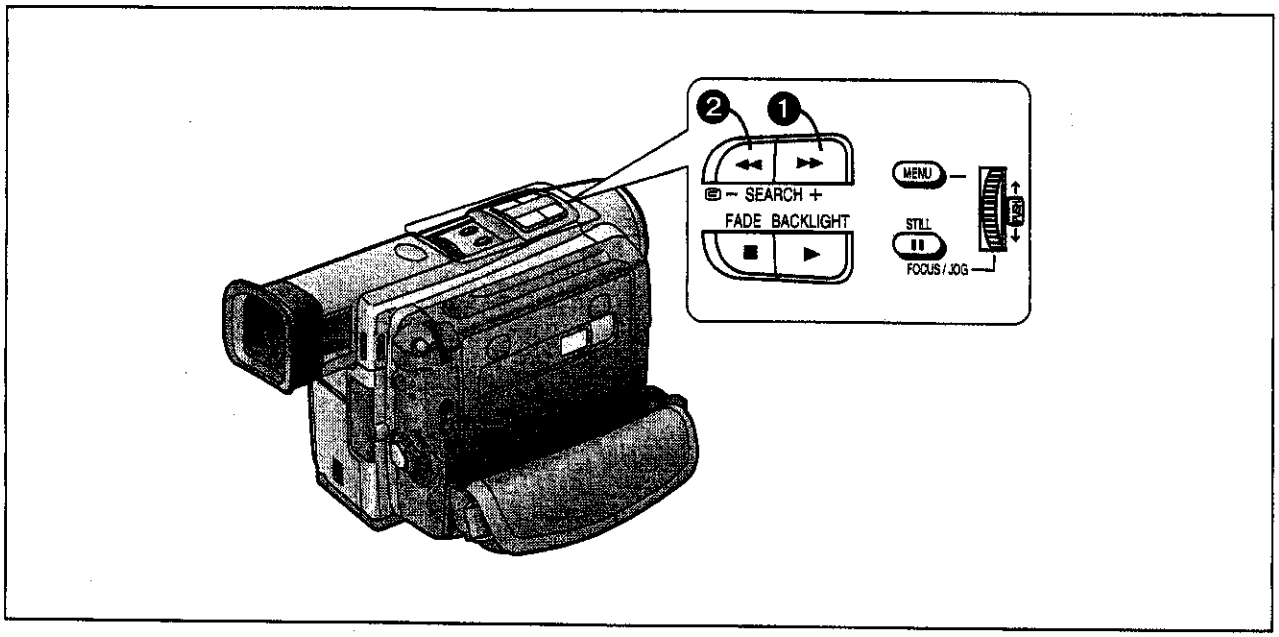
1 按[VCR/CAMERA]（錄放影機/攝錄影機）鈕，使[VCR]燈❶亮起。

2 按倒帶[◀◀]鈕，倒轉錄影帶。
- 將錄影帶倒轉至將要開始拍攝之點。
- 若錄影帶到達開頭時，將自動停止倒帶。

3 按放影[▶]鈕，開始放影。

4 停止放影時：
按停止[■]鈕。

使日期/時間指示出現時
該攝錄影機會自動將日期和時間作為副編碼部分來錄製（➔ 144）。
使日期/時間指示出現時，請將菜單上的[DATE/TIME]（日期/時間）設定為需要的數值。



ENGLISH

Searching for a Scene You Want to Play Back

Cue Playback
Keep the Cue Button [▶▶] ❶ pressed during playback.

Review Playback
Keep the Review Button [◀◀] ❷ pressed during playback.

Search Lock Function
For longer Cue or Review Playback, press the Cue Button [▶▶] or Review Button [◀◀] only briefly. As this locks the search function, you do not need to keep the button pressed for a long time.

- To resume normal playback, press the Play Button [▶].
- In Cue and Review Playback, pictures with fast-moving subjects may contain mosaic-like patterns.

Hyper Check Function
- If you press the Fast-forward Button [▶▶] during fast-forwarding of the tape or the Rewind Button [◀◀] during rewinding of the tape, Cue Playback or Review Playback continues for as long as you keep the Button pressed.
- ♦ Before and after activating the Cue Playback or Review Playback, the screen may momentarily distorted.

中文

尋影您打算播放的場景

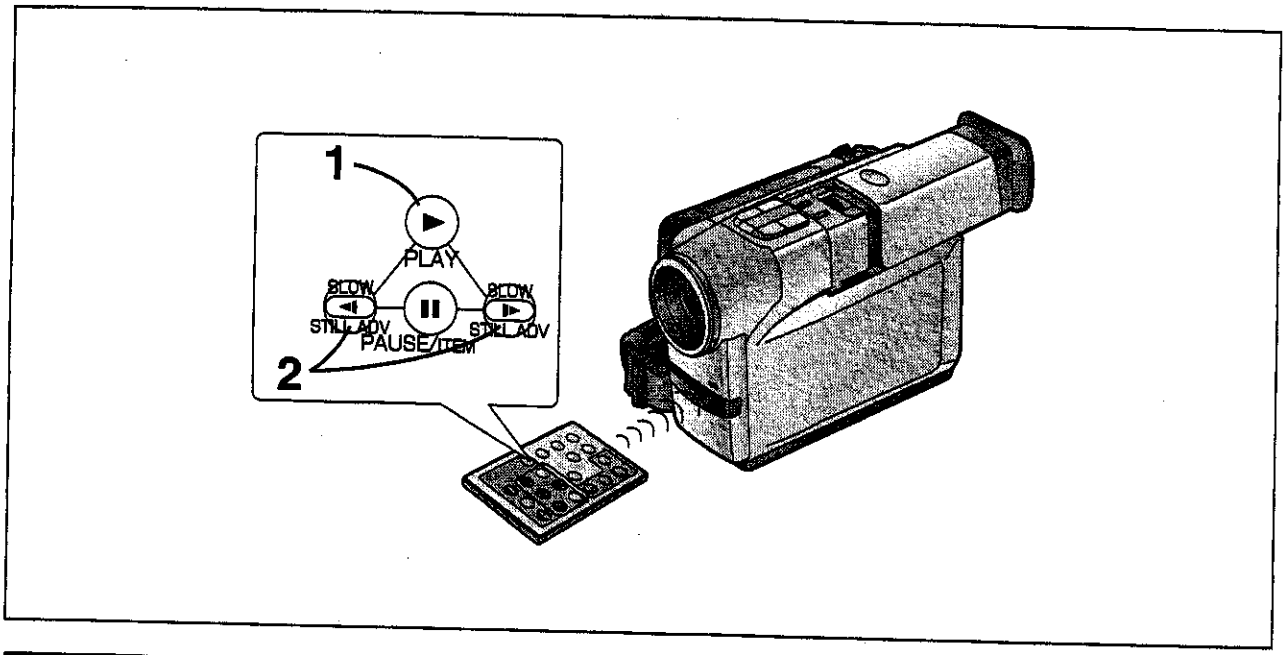
快進尋影播放
在放影中，按住快進尋影[▶▶]鈕❶。

倒帶尋影播放
在放影中，按住倒帶尋影[◀◀]鈕❷。

尋影鎖定功能
進行較長的快進尋影或倒帶尋影時，只能短暫地按快進尋影[▶▶]鈕或倒帶尋影[◀◀]鈕。由於這樣做會鎖定尋影功能，所以不必要長時間地按鈕。

- 恢復普通放影時，請按放影[▶]鈕。
- 在快進尋影和倒帶尋影播放中，含有快速移動物體的圖像可能會斑紋狀雜訊。

高級檢查功能
- 如果您在錄影帶快進中按快進[▶▶]鈕，或在錄影帶的倒帶中按倒帶[◀◀]鈕時，按住該鈕多長時間，便可進行多長時間的快進尋影播放或倒帶尋影播放。
- ♦ 啟動快進尋影播放或倒帶尋影播放功能的前後，屏幕可能會短暫失真。



ENGLISH

Playing Back in Slow Motion
(Slow Motion Playback)

1 Press the Play Button [▶].

2 Press the Slow Motion/Still Advance Button [◂I] or [I▸] on the Remote Controller.
Pressing the [◂I] Button starts slow motion playback in reverse direction, and pressing the [I▸] Button starts slow motion playback in forward direction.

Scenes recorded in the SP Mode are played back at approximately 1/5th of the normal speed.
Scenes recorded in the LP Mode are played back at approximately 1/3rd of the normal speed.

Resuming Normal Playback
Press the Play Button [▶].
Playback continues with normal speed.

- During slow motion playback in reverse direction, the Time Code Indication may not be accurate.

中文

以慢動作進行播放（慢動作放影）

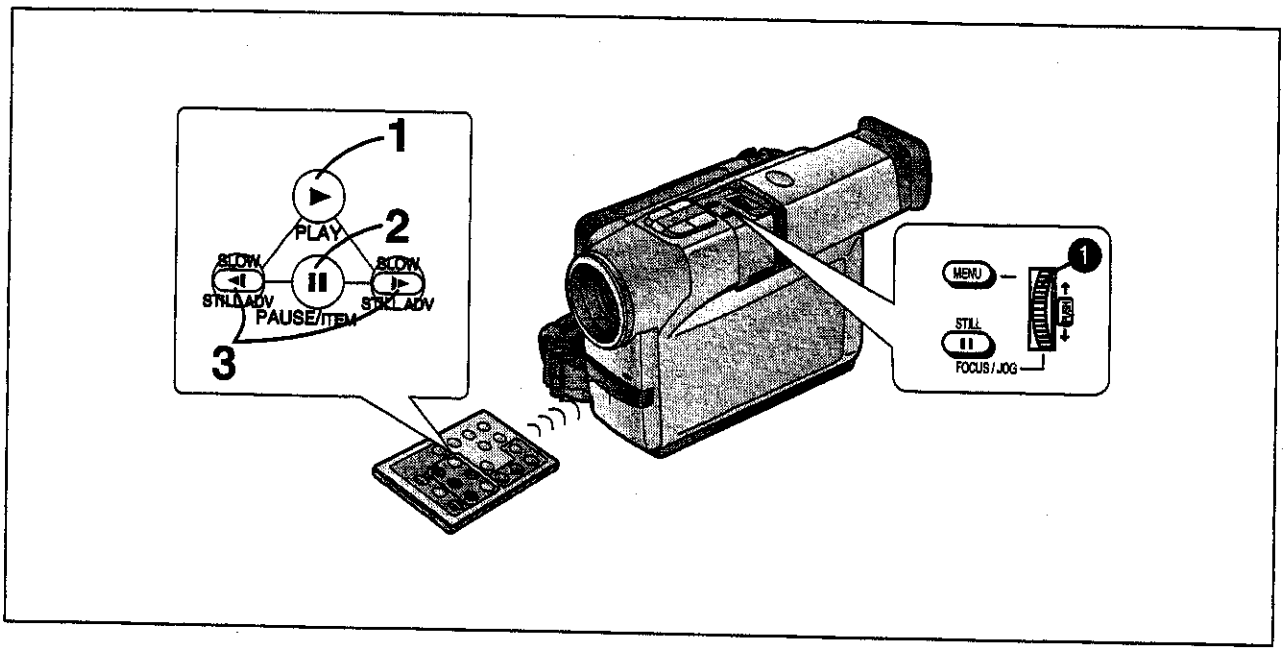
1 按放影[▶]鈕。

2 按遙控器上的慢動作/靜止步進[◂I]或[I▸]鈕。
按[◂I]鈕時，可開始反向慢動作放影，按[I▸]鈕時，則可開始正向慢動作放影。

在SP狀態下拍攝的場景將以普通速度的約 1/5 的速度得到播放。
在LP狀態下拍攝的場景將以普通速度的約 1/3 的速度得到播放。

恢復普通放影時
按放影[▶]鈕。
將以普通速度繼續進行放影。

- 在反向慢動作放影中，時間編碼指示可能不精確。



ENGLISH

Playing Back Still Pictures and Advancing Them One by One

(Still Playback/Still Advance Playback)

You can freeze the action during playback and advance the still pictures one by one.

1 Press the Play Button [▶].

2 Press the Pause Button [❚❚].
The playback picture stops in the Still Playback Mode.

3 Press the Slow Motion/Still Advance Button [◂❚] or [❚▸] on the Remote Controller.
Pressing the [◂❚] Button advances the still picture frame by frame in reverse direction. Pressing the [❚▸] Button advances the still picture frame by frame in forward direction.

Resuming Normal Playback

Press the Play Button [▶].

Playback continues with normal speed.

- If you keep the [❚▸] Button on the Remote Controller pressed for more than 1 second during Still Advance Playback, the Movie Camera switches over to the Slow Motion Playback Mode with slower speed than in the normal Slow Motion Playback Mode.
- ♦ If you leave the Movie Camera in the Still Playback Mode for more than 6 minutes, it switches over to the Stop Mode to protect the video heads against excessive wear.
- ♦ During Still Advance Playback, the Time Code Indication may not be accurate.

Using the Jog Dial (Jog Playback)

By turning the Jog Dial ([PUSH] Dial) ❶ on the Movie Camera in the Still Playback Mode, you can advance the still pictures one by one in forward or reverse direction.

中文

播放靜止圖像和一幀幀地進行步進（靜止放影/靜止步進放影）

在放影中，您可使動作停止和使靜止圖像一幀一幀地步進。

1 按放影[▶]鈕。

2 按暫停[❚❚]鈕。
在靜止放影狀態下，播放的圖像會停止。

3 按遙控器上的慢動作/靜止步進[◂❚]或[❚▸]鈕。
按[❚▸]鈕，可使靜止圖像一幀幀地反向步進。按[◂❚]鈕，則可使靜止圖像一幀幀地正向步進。

恢復普通放影時

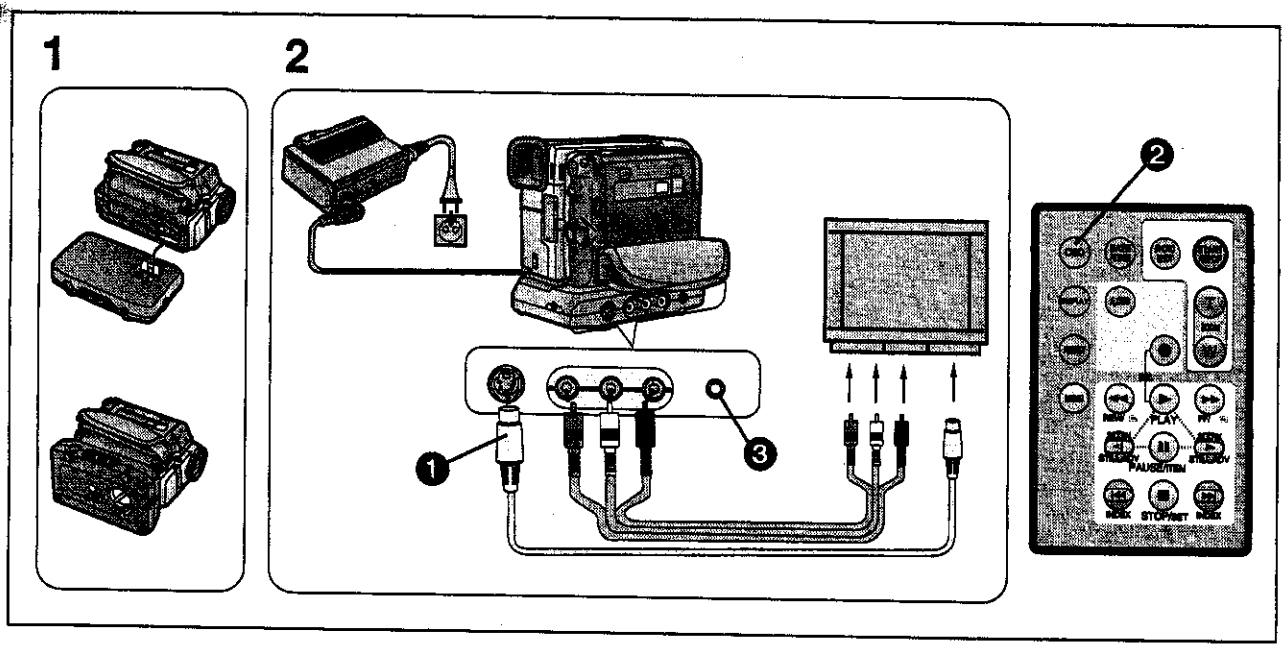
按放影[▶]鈕。

將以普通速度繼續進行放影。

- 在靜止步進放影中，如果您按住遙控器上的[❚▸]鈕超過1秒鐘時，攝錄影機將切換至慢動作放影狀態，其速度將慢於普通慢動作放影狀態的速度。
- ♦ 如果您讓攝錄影機處於靜止放影狀態超過6分鐘時，本機將切換至停止狀態，以免影像磁頭嚴重磨損。
- ♦ 在靜止步進放影中，時間編碼指示可能不精確。

使用緩進環時（緩進放影）

在靜止放影狀態下，旋轉攝錄影機上的緩進環（[PUSH]環）❶，可使靜止圖像一幀一幀地正向或反向步進。



ENGLISH

Playing Back on a TV
(With the Output Terminal Box Attached)

Attaching the Output Terminal Box to the Movie Camera makes it possible to playback recorded scenes on a TV.

1 Attach the Output Terminal Box. (→ 102)

2 Connect to the Video and Audio Input Sockets on the TV.
Use the AV Cable to connect to the TV. If your TV is equipped with an S-Video Socket, also connect the S-Video Cable ❶.

- Before connecting, turn off both the Movie Camera and the TV.
- If a cassette recorded with copyright protection signal is played back, the screen becomes black. However, scenes recorded with this Movie Camera do not contain a copyright protection signal.

Making the Indications Appear on the TV Screen
Press the [OSD] Button ❷ on the Remote Controller. The On-Screen Indications also appear on the TV screen.

Playing Back the Sound via Headphones
Using the [PHONE] Socket ❸ on the Output Terminal Box lets you play back the sound on the headphones.

中文

在電視機上進行放影
(安裝了輸出端子箱時)

將輸出端子箱安裝在攝錄影機上後，可在電視機上播放拍攝的場景。

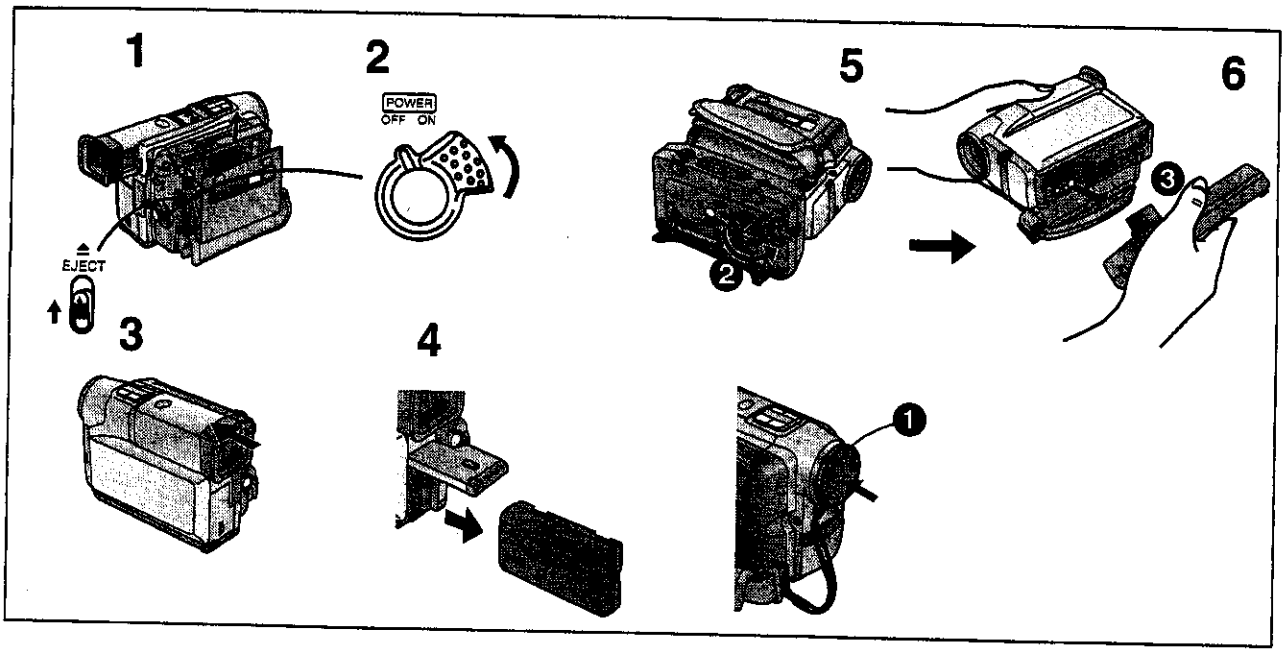
1 安裝輸出端子底座。(→ 102)

2 連接至電視機上的影像和音頻輸入插孔。
使用AV纜線連接至電視機。如果您的電視機具備S影像插孔時，也可連接S影像纜線 ❶。

- 連接之前，請關閉攝錄影機和電視機。
- 如果播放帶有版權保護信號的錄影帶時，屏幕可能會變黑。然而，用該攝錄影機拍攝的場景將不會含有版權保護信號。

使電視機屏幕上出現指示時
按遙控器上的[OSD] (屏幕顯示) 鈕 ❷。
電視機屏幕上也會出現屏幕指示。

通過頭戴耳機播放聲音時
利用輸出端子箱上的[PHONE]插孔 ❸，可讓您在頭戴耳機上播放聲音。



ENGLISH

After Use

1 Take out the cassette.(➜22)

2 Set the [POWER ON/OFF] Switch to [OFF].

3 Retract the Finder.

4 Take out the Battery. (➜18)

Attaching the Lens Cap ❶
After use, attach the supplied Lens Cap to the Lens to protect it.

Removing the Output Terminal Box
When the Output Terminal Box is attached to the Movie Camera, remove it in the following way.

5 Turn the Locking Handle in the direction of the arrow ❷.

6 Pull off the Output Terminal Box in the direction of the arrow ❸.

中文

使用之後

1 取出錄影帶。(➜22)

2 將[POWER ON/OFF]開關設置在[OFF]。

3 收回電子尋像器。

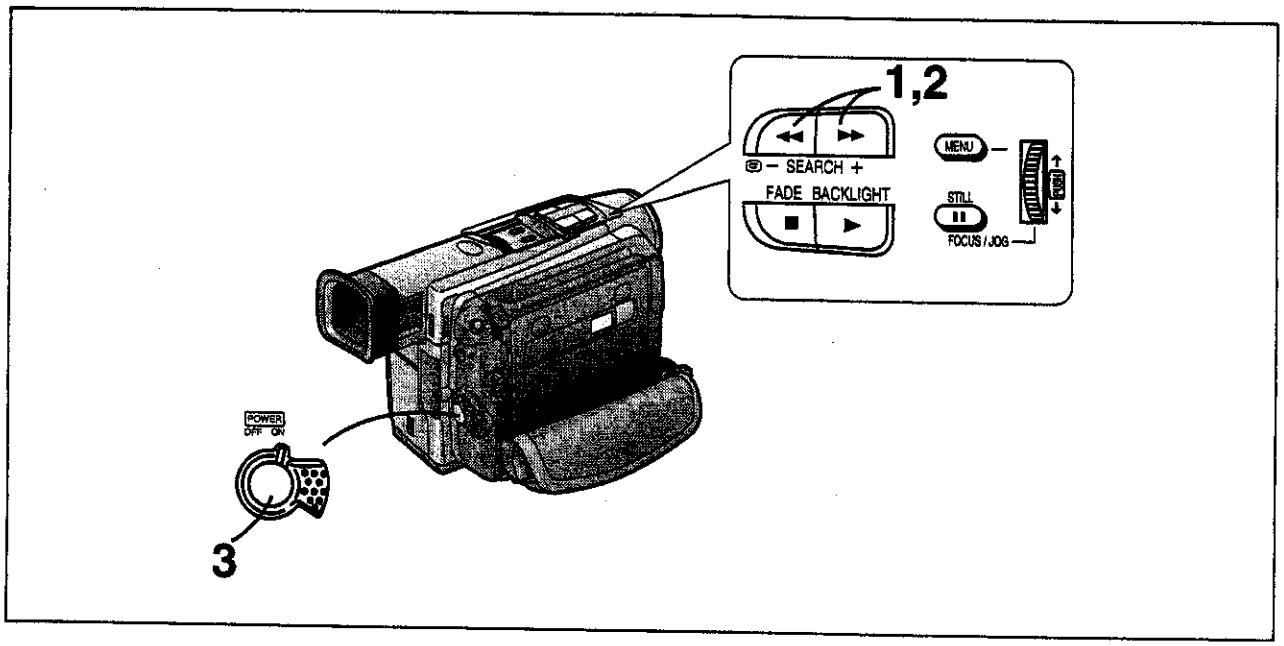
4 取出電池。(➜18)

安裝鏡頭蓋時 ❶
使用之後，請將附帶的鏡頭蓋安裝在鏡頭上，以保護鏡頭。

取出輸出端子箱時
當輸出端子箱裝在攝錄影機上時，請依下列步驟將其取出。

5 依箭頭 ❷ 所示，轉動鎖定把手。

6 依箭頭 ❸ 所示，拉出輸出端子箱。



ENGLISH

Viewing Recorded Scenes During Recording Pause

(Camera Search)

You can view recorded scenes when the Movie Camera is in the Recording Pause Mode.
The Camera Search Function is convenient to search for a scene from which you want to start recording a new scene with smooth scene-to-scene transition.

1 Keep the Reverse Search Button [◀◀] or the Forward Search Button [▶▶] pressed for more than 1 second.

Pressing the [◀◀] Button plays back the picture in reverse direction.
Pressing the [▶▶] Button plays back the picture in forward direction.

Starting to Record from the Desired Position

2 Release the pressed Search Button.

The Movie Camera is in the Recording Pause Mode.

3 Press the Start/Stop Button to start recording.

The Movie Camera starts recording a new scene with smooth scene-to-scene transition.

- In the Camera Search Mode, the picture may contain mosaic-like patterns. However, this is a phenomenon particular to digital video and completely normal.
- ♦ If the Recording Speed Mode (SP/LP) of the previous and the new recording are different, the playback picture may be distorted.

中文

在拍攝暫停中觀看已錄場景

(攝錄影機尋影)

當攝錄影機處於拍攝暫停狀態時，可觀看拍攝的場景。
攝錄影機尋影功能便於尋找您打算用圓滑的場景與場景過渡方法，開始拍攝新景之場景。

1 按住反向尋影[◀◀]鈕，或正向尋影[▶▶]鈕1秒鐘以上。

按[◀◀]鈕，可反向播放圖像。
按[▶▶]鈕，可正向播放圖像。

從需要的位置開始放影時

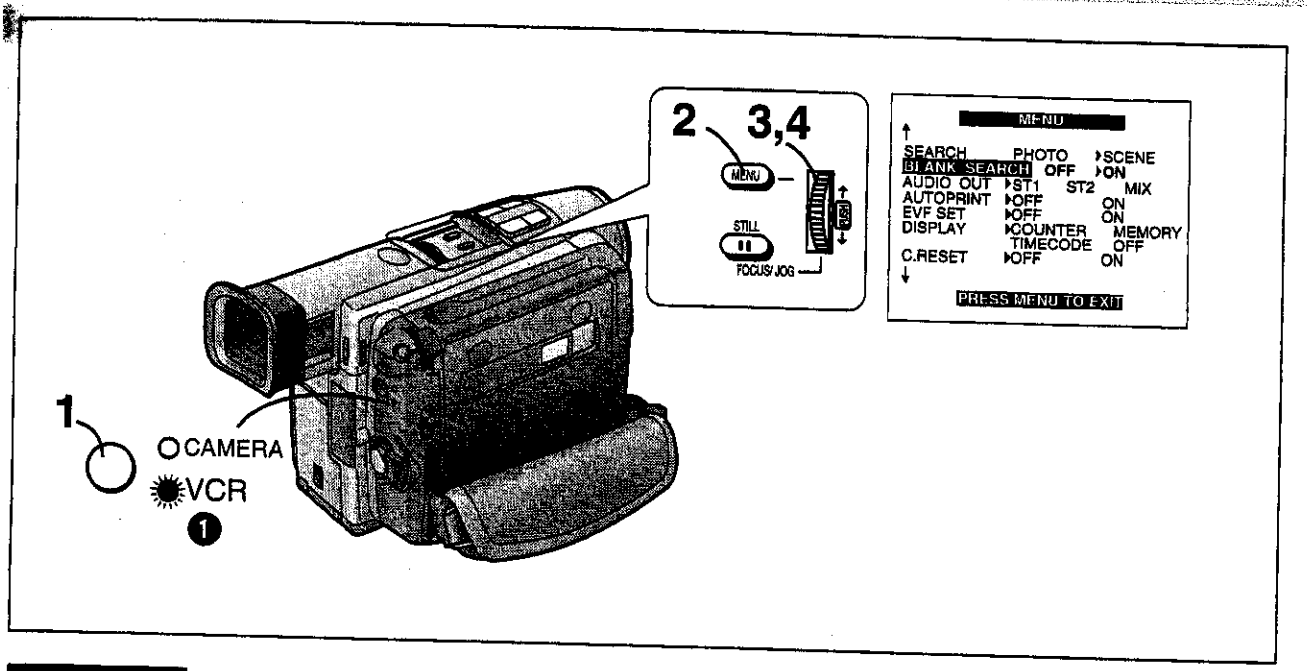
2 鬆開被按住的尋影鈕。

攝錄影機將處於拍攝暫停狀態。

3 按啟動/停止鈕，可開始拍攝。

攝錄影機將用圓滑的場景與場景過渡方法，開始拍攝新的場景。

- 在攝錄影機尋影狀態下，圖像中可能含有斑紋狀雜訊。然而，這是數位影像的特有現象，是完全正常的。
- ♦ 若以前的拍攝速度狀態 (SP/LP) 和新的拍攝不同，播放的圖像可能會失真。



ENGLISH

Searching for the End of the Recorded Part on a Cassette

(Blank Search)

With the Blank Search Function you can quickly locate the end of the recorded part on a cassette (or a blank part between recordings).

1 Press the [VCR/CAMERA] Button so that the [VCR] Lamp lights. ❶

2 Press the [MENU] Button.
The Menu appears.

3 Turn the [PUSH] Dial to select [BLANK SEARCH].

4 Press the [PUSH] Dial to select [ON].
Approximately 1 second before the end of the last recorded scene, the Movie Camera switches over to the Still Playback Mode.

- If there is no blank part on a cassette, the Movie Camera stops at the end of the tape.
- When the Blank Search has finished, you can press the [VCR/CAMERA] Button so that the [CAMERA] lamp lights and start recording. The new scene is recorded with a smooth transition from the last to the new scene.

中文

尋影錄影帶上已錄場景的結尾

(空白尋影)

使用空白尋影功能，可快速位於錄影帶上已錄部分的結尾(或拍攝之間的空白部分)。

1 按[VCR/CAMERA](錄放影機/攝錄影機)鈕使[VCR]燈亮起❶。

2 按[MENU](菜單)鈕。
即會出現菜單。

3 轉動[PUSH](下按)環，選擇[BLANK SEARCH](空白尋影)。

4 按[PUSH]環，選擇[ON]。
在最後拍攝場景之前的約1秒鐘，攝錄影機將切換至靜止放影狀態。

- 如果錄影帶上無空白，攝錄影機會停止在磁帶結尾。
- 當空白尋影結束操作時，您可[VCR/CAMERA]鈕，使[CAMERA]燈亮起，然後開始拍攝。將用上次場景圓滑地過渡到新場景之方法來拍攝新的場景。

ENGLISH

Searching for the Beginning of Recorded Scenes Marked the Index Signal

(Index Search)

Index Search

To allow easy searching for desired scenes, this Movie Camera automatically records index signals during recording as follows:

❶ Photoshot Index Signal

To search for still pictures recorded in the Photoshot Mode (➔ 38) and to ues for automatic printing (➔ 112).

A photoshot index signal is automatically recorded every time you record a still picture in the Photoshot Mode.

❷ Scene Index Signal

To search for the beginning of recorded scenes.

A scene index signal is automatically recorded in the following cases:

- When you start recording after inserting a cassette.
- Depending on the setting of [SCENEINDEX] on the [MENU (OTHERS)] Menu (➔118-122):

[2HOUR]: An index signal is recorded when recording is restarted after a lapse of more than 2 hours.

[DAY]: An index signal is recorded when recording is restarted after the date has changed since the last recording.

(While an index signal is being recorded, the [INDEX] Indication flashes for a few seconds.)

中文

尋影帶有索引信號標誌的拍攝場景

索引尋影

為了簡單地尋找需要的場景，在下列拍攝狀況下，該攝錄影機會自動錄製索引信號：

❶ 拍照索引信號

可尋影在拍照狀態下拍照的靜止圖像 (P.38)，和用於自動打印 (➔ 112)。

在拍攝狀態下，每當您拍攝靜止圖像時，都會自動錄製拍照索引信號。

❷ 場景索引信號

可尋影拍攝場景的開頭。

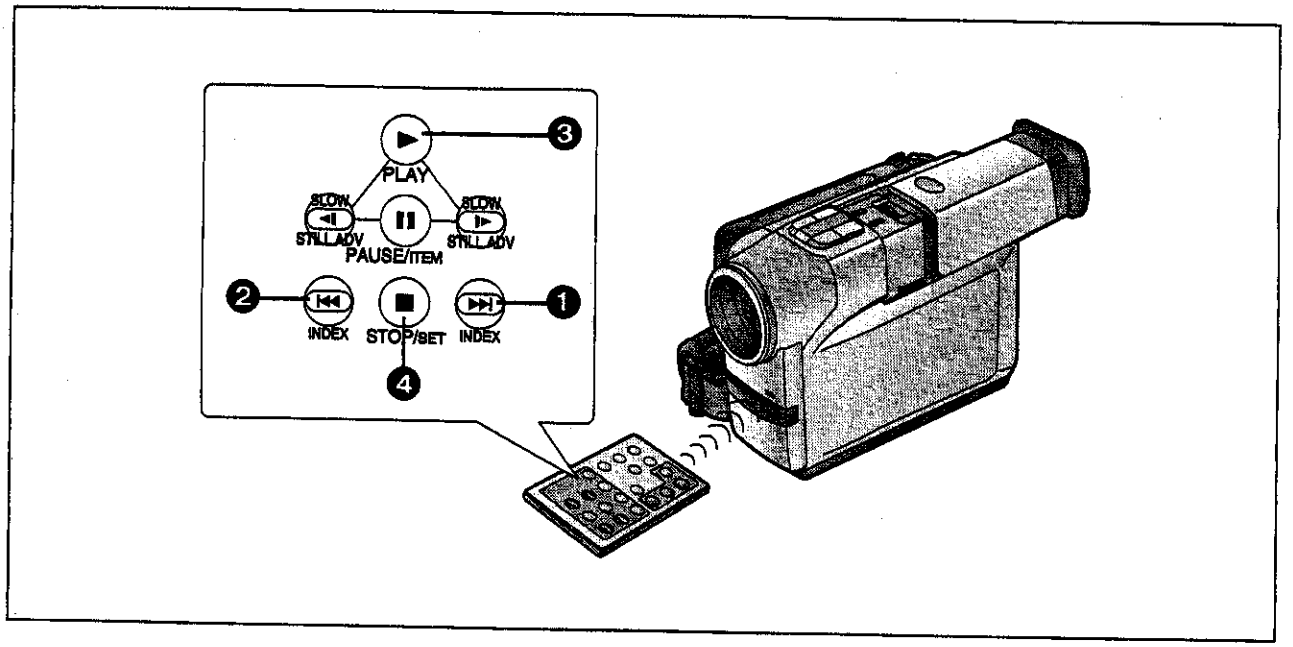
在下列情況下，會自動錄製場景索引信號：

- 插入錄影帶後開始拍攝時；
- 根據[MENU (OTHERS)]菜單上的[SCENE INDEX] (場景) 的設定值 (➔ 118~122)：

[2 HOUR]: 當在2小時的間隔後重新開始拍攝時，會錄製索引信號。

[DAY]: 在上次拍攝以來的日期已經改變後，重新進行拍攝時，會錄製索引信號。

(在索引信號錄製中，[INDEX]指示會閃爍幾秒鐘。)



ENGLISH

Searching for the beginning of Still Pictures Recorded in the Photoshot Mode

(Photoshot Index Search)

- Press the [VCR/CAMERA] Button on the Movie Camera so that the [VCR] Lamps lights.
- Set [SEARCH] on the Menu to [PHOTO]. (➔ 118,124) (The initial setting is [PHOTO].)

Photoshot Index Search in Forward Direction

Press the Index Button [▶▶I] ❶ on the Remote Controller.

Photoshot Index Search in Reverse Direction

Press the Index Button [I◀◀] ❷ on the Remote Controller.

- At every press of the corresponding button, the tape is fast-forwarded or rewound to the next still picture recorded in the Photoshot Mode. After reaching the next still picture, the still picture is played back continually together with the sound (only for apporx. 4 seconds). (If you leave the Movie Camera in the Still Playback Mode for more than 6 minutes, it switches over to the Stop Mode to protect the video heads against excessive wear).

♦ The Photoshot Index Search may not work correctly for still pictures recorded near the beginning of the tape.

- If you keep the [I◀◀] or [▶▶I] Button pressed for more than 2 seconds, the Intro Search Function is activated and it plays back all still pictures recorded in the Photoshot Mode on the cassette one after another for a few seconds each. (To cancel the Intro Search Function, press the Play Button [▶] ❸ or the Stop Button [■] ❹.)

中文

尋在拍攝狀態下拍攝的影拍攝圖像的開頭（拍照索引尋影）

- 按攝錄影機上的[VCR/CAMERA]（錄放影機/攝錄影機）鈕，使[VCR]燈亮起。
- 將菜單上的[SEARCH]（尋影）項設定為[PHOTO]（拍照）。（➔ 118，124）（初始設定為[PHOTO]。）

正向拍照索引尋影時

按遙控器上的索引[▶▶I]鈕 ❶。

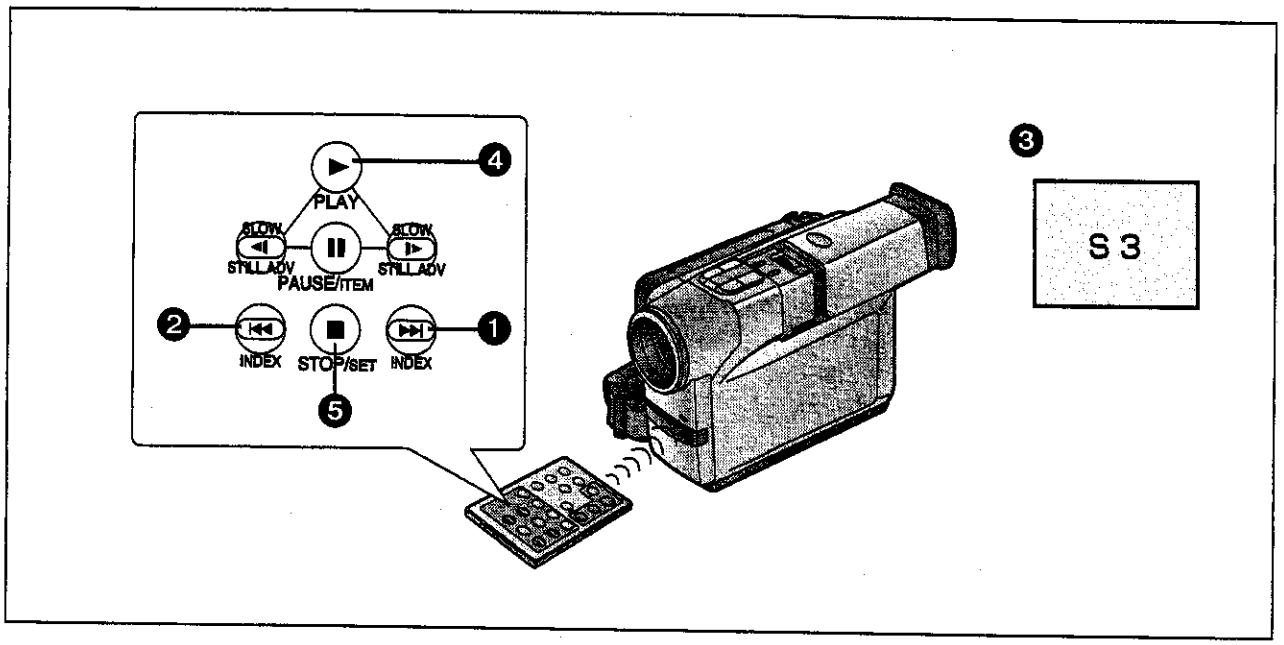
反向拍照索引尋影時

按遙控器上的索引[I◀◀]鈕 ❷。

- 每次按相應的鈕，錄影帶將快進或倒帶至下一幀在拍攝狀態下拍攝的靜止圖像。到達下一幀靜止圖像之後，將配合聲音一起播放靜止圖像（僅4秒鐘左右）（如果讓攝錄影機處於靜止放影狀態超過6分鐘時，本機將切換至停止狀態，以防止影像磁頭嚴重受損）。

♦ 對於錄製在錄影帶開頭附近的靜止圖像，拍照索引尋影功能可能無法正常工作。

- 如果您按住[I◀◀]或[▶▶I]鈕 2 秒鐘以上，將啟動放頭尋影功能。該功能將一幀接一幀地播放錄影帶上在拍攝狀態下拍攝的所有靜止圖像（每幀幾秒鐘）。（取消放頭尋影功能時，請按放影[▶]鈕 ❸ 或停止[■]鈕 ❹。）



ENGLISH

Searching for the Beginning of Recorded Scenes (Scene Index Search)

- Press the [VCR/CAMERA] Button on the Movie Camera so that the [VCR] Lamps lights.
- Set [SEARCH] on the Menu to [SCENE] .(➔118,124)

Scene Index Search in Forward Direction
Press the Index Button [▶▶I] ❶ on the Remote Controller.

Scene Index Search in Reverse Direction
Press the Index Button [I◀◀] ❷ on the Remote Controller.

- When you briefly press the corresponding button once, the [S1] Indication appears and the search for the next scene marked with an index signal starts. After the Scene Index Search has started, every time you press the button, the indication changes successively from [S2] to [S9], and the beginning of the scene corresponding to the number is located.❸
  After reaching the desired scene, playback starts automatically.(At a time, Scene Index Search in forward or reverse direction is possible up to the ninth scene from the present tape position.)

♦ If the distance between two scene index signals is less than 1 minute, the Scene Index Search may not work correctly.
♦ The Scene Index Search may not work correctly for scenes recorded near the beginning of the tape.
- If you keep the [I◀◀] or [▶▶I] Button pressed for more than 2 seconds, the Intro Search Function is activated and it plays back the beginning of all scenes marked with an index signal on the cassette one after another for a few seconds each.
  (To cancel the Intro Search Function, press the Play Button [▶] ❹ or the Stop Button [■] ❺.)

中文

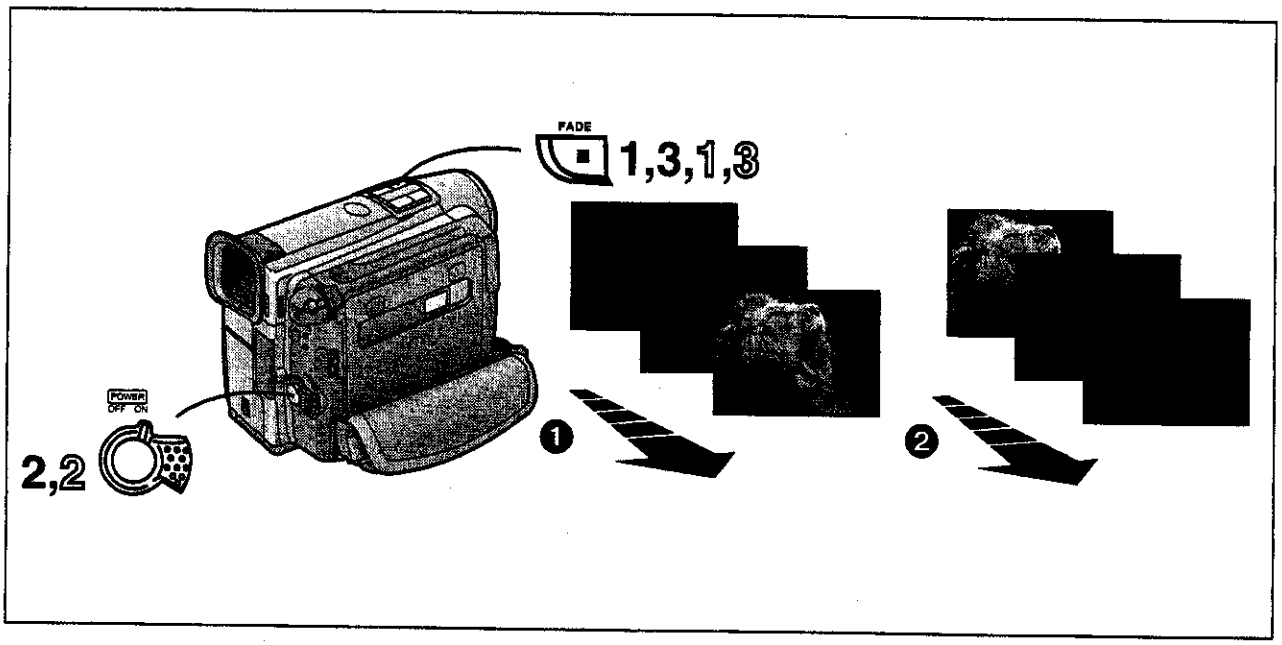
尋影已錄場景的開頭(場景索引尋影)

- 按攝錄影機上的[VCR/CAMERA] (錄放影機/攝錄影機)鈕，使[VCR]燈亮起。
- 將菜單上的[SEARCH] (尋影) 項設定為[SCENE] (場景) 。(➔118，124)

正向場景索引尋影時
按遙控器上的索引[▶▶I]鈕 ❶ 1次。

反向場景索引尋影時
按遙控器上的索引[I◀◀]鈕 ❷ 1次。

- 當您輕按相應的帶有索引信號標誌的鈕一次時，會出現[S1]指示，並開始尋影下一個場景。在場景索引尋影開始之後，每次按該鈕，指示將不斷從[S2]變為[S9]，且會定位於與號碼相應的場景開頭 ❸。到達需要的場景之後，將自動開始放影 (此時，場景索引尋影功能最多可從目前的錄影帶位置開始，正向或反向尋影 9 個場景) 。
- ♦ 如果兩個場景索引信號之間的距離少於 1 分鐘時，場景索引尋影功能可能無法正常工作。
- ♦ 對於錄製在錄影帶開頭附近的場景，場景索引尋影功能可能無法正常工作。
- 如果您持續按住[I◀◀]或[▶▶I]鈕 2 秒鐘以上，將啟動放頭尋影功能。該功能將一個接一個地播放錄影帶上所有帶有索引信號標誌的場景的開頭 (每個幾秒鐘) 。
  (取消放頭尋影功能時，請按放影 [▶]鈕 ❹ 或停止[■]鈕 ❺。)



ENGLISH

Fading In/Out

Fading In ❶

Fading-in lets you make the picture and sound appear gradually from a black screen at the beginning of a scene.

1 With the Movie Camera in the Recording Pause Mode, keep the Fade Button [■] pressed.
The picture gradually disappears.

2 When the picture has completely disappeared, press the Start/Stop Button to start recording.

3 Approximately 3 seconds after the recording has started, release the Fade Button [■].
The picture gradually appears again.

Fading Out ❷

Fading-out lets you make the picture and sound disappear gradually into a black screen at the end of a scene.

1 **During recording, keep the Fade Button [■] pressed.**
The picture gradually disappears.

2 **After the picture has completely disappeared, press the Start/Stop Button to stop recording.**
The Movie Camera is in the Recording Pause Mode.

3 **Release the Fade Button [■].**

中文

淡入/淡出

淡入 ❶

淡入可讓您在場景開頭，使圖像和聲音逐漸從黑屏幕中出現。

1 在攝錄影機處於拍攝暫停狀態下，按住淡化[■]鈕。
圖像會逐漸消失。

2 當圖像已經完全消失後，按啟動/停止鈕，開始拍攝。

3 在拍攝開始後約 3 秒鐘，鬆開淡化[■]鈕。
圖像會再次逐漸出現。

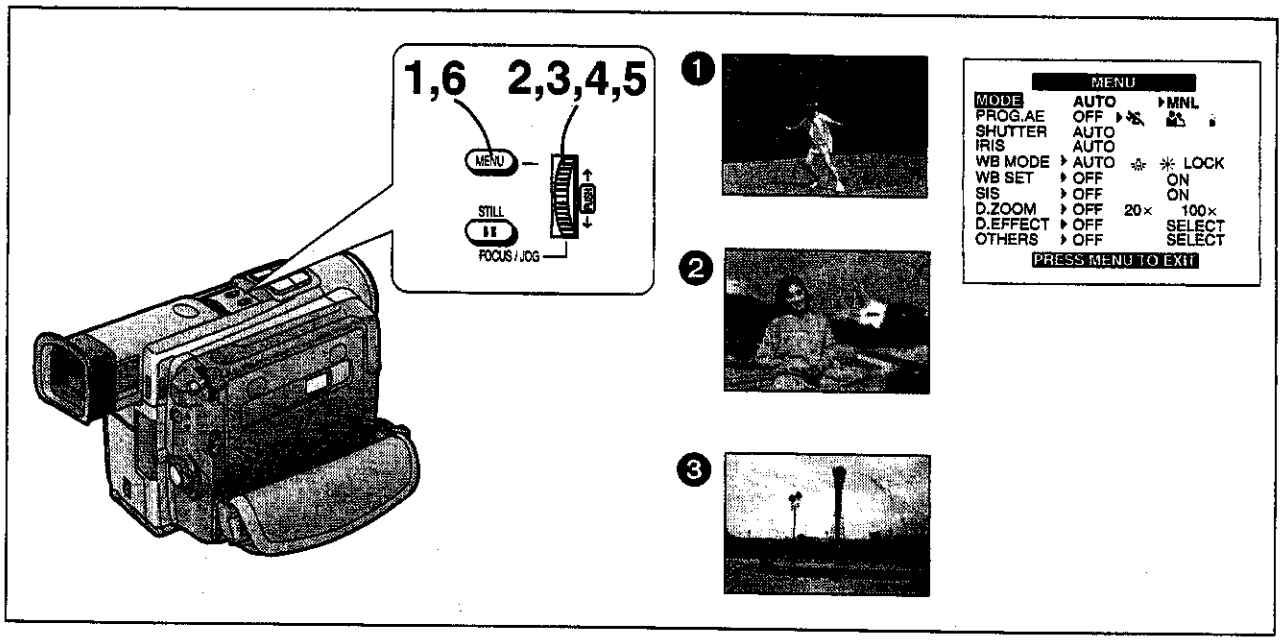
淡出 ❷

淡出可讓您在場景結尾，使圖像和聲音逐漸消失在黑屏幕中。

1 **在拍攝中，按住淡化[■]鈕。**
圖像會逐漸消失。

2 **當圖像已經完全消失後，按啟動/停止鈕，停止拍攝。**
攝錄影機將處於拍攝暫停狀態。

3 **鬆開淡化[■]鈕。**



ENGLISH

Recording in Various Situations
(Programme AE)

This function lets you select Automatic Exposure settings optimized for special recording situation.

1 Press the [MENU] Button.
The Menu appears.

2 Turn the [PUSH] Dial to select [MODE].

3 Press the [PUSH] Dial to select [MNL].

4 Turn the [PUSH] Dial to select [PROG.AE].

5 Press the [PUSH] Dial to select the desired mode ([ ], [ ] or [ ]).
This makes it impossible to set [SHUTTER] and [IRIS] on the Menu to [SELECT].

6 Press the [MENU] Button to exit the Menu.
The indication of the selected mode appears .

[ ] Sports Mode ❶
To record scenes with fast-moving subjects such as sports scenes.

[ ] Portrait Mode ❷
To make subjects stand out sharply from the background.

[ ] Low Light Mode ❸
To record dark scenes more brightly.

Cancelling the Programme AE Function
Set [PROG.AE] on the Menu to [OFF].

中文

在各種狀況下拍攝 (程序AE)

該功能可讓您選擇最適合特殊拍攝狀況的自動曝光設定。

1 按[MENU](菜單)鈕。
- 即出現菜單。

2 轉動[PUSH](下按)環，選擇[MODE](狀態)。

3 按[PUSH]環，選擇[MNL](手動)。

4 轉動[PUSH]環，選擇[PROG.AE](程序AE)。

5 按[PUSH]環，選擇需要的狀態([ ]、[ ]或[ ])。
在菜單的[SHUTTER](快門)和[IRIS](光圈)項，將無法選擇[SELECT]。

6 按[MENU]鈕，退出菜單。
會出現所選擇的狀態。

[ ]運動狀態 ❶
可拍攝運動場景之類快速移動的目標物。

[ ]素描特寫 ❷
可使目標物明顯地突出於背景。

[ ]弱光狀態 ❸
可將較暗的場景拍得更亮。

取消程序AE功能時
將菜單上的[PROG.AE]設置在[OFF]。

ENGLISH

Sports Mode

- When playing back scenes recorded in the Sports Mode, you can enjoy slow motion and still playback of very sharp images with fine details.
- Avoid recording under fluorescent, mercury-vapour or natrium lamps as the colour and the brightness of the playback picture might fluctuate.
- When recording subjects lit by strong lights or with much light reflection, the playback picture may contain vertical streaks of light.
- When the scene is not sufficiently lit, the [ ] Indication flashes.
- When using this mode for recording indoors, the playback picture may flicker.

Portrait Mode

- When using this mode for recording indoors, the playback picture may flicker.

Low Light Mode

- It may not be possible to sufficiently brighten up extremely dark scenes.

- If you select [GAINUP] on the [MENU (D.EFFECT)] Menu (➔ 74) while you are using the Sports Mode or Portrait Mode this mode is cancelled.

中文

運動狀態

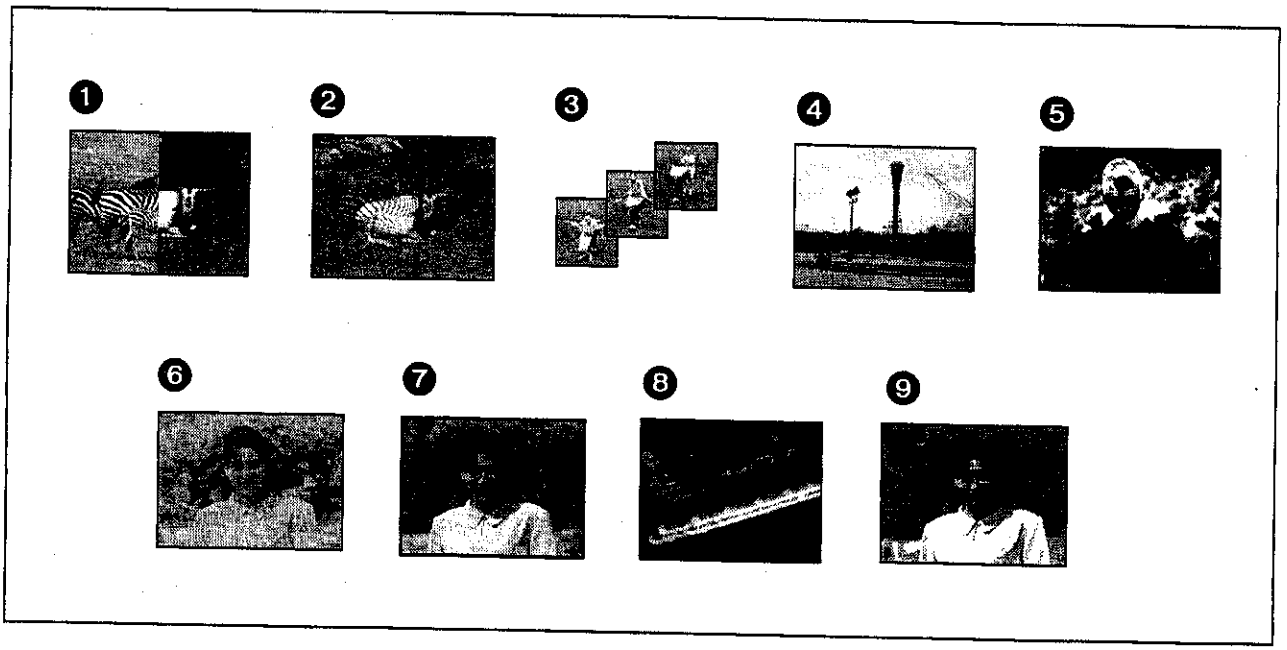
- 播放用運動狀態拍攝的場景時，可欣賞圖像細部極其精微、清晰的慢動作和靜止放影。
- 應避免在熒光燈、水銀蒸汽燈或鈉蒸汽燈下進行拍攝，否則播放圖像的色彩和亮度會有閃變現象。
- 當拍攝的目標物受強光照射或反光很強時，播放的圖像可能帶有垂直光紋。
- 當場景的光線不足時，[ ]指示會閃爍。
- 當利用該狀態進行室內拍攝時，播放的圖像可能會閃光。

素描特寫狀態

- 當利用該狀態進行室內拍攝時，播放的圖像可能會閃光。

弱光狀態

- 對於特別黑暗的場景，可能無法足夠地增光。
- 如果您在使用運動狀態或素描特寫狀態中，選擇了[MENU] (D.EFFECT) 菜單 (➔74) 中的[GAINUP] (超高靈敏度)，則將取消該狀態。



ENGLISH

Recording with Special Effects
(Digital Effects)

There are 9 different modes available for adding special digital picture effects.

❶ **Wipe Mode [WIPE]**
It gradually replaces a picture of the last recorded scene with the picture of the new scene, like drawing the curtain. For details, (➔ 76)

❷ **Mix Mode [MIX]**
It gradually fades out the picture of the last recorded scene while fading in the picture of the new scene. For details, (➔ 78)

❸ **Strobe Mode [STROBE]**
It records the pictures with a strobescope-like effect.

❹ **Gain-up Mode [GAINUP]**
It electronically brightens up the picture.
- In this mode, adjust the focus manually.
- ♦ Some After-image distortion may occur during recoding with the Gain-up Function.

❺ **Negative/Positive Mode [NEGA]**
The recorded pictures have reversed colours similar to photographic negatives.

❻ **Sepia Mode [SEPIA]**
Scenes are recorded with a brown tint similar to the colour of old photographs.

❼ **Monotone Mode [B/W]**
The picture is recorded in black and white.

❽ **Trailing Effect Mode [TRACER]**
The picture is recorded with a trailing effect.

❾ **Solarisation Mode [SOLARI]**
The picture is recorded with reversed colours.

♦ The Digital Effects cannot be used when the Super Image Stabilizer Function or the Digital Zoom Function is activated.
When you want to use a digital effect, be sure to set both [D.ZOOM] and [SIS] on the Menu to [OFF].

中文

用特殊效果拍攝 (數位效果)

有九種不同的狀態可用於增添特殊數位圖像效果。

❶ **劃變狀態** [WIPE]
該功能可用新場景的圖像逐漸取代以前拍攝的最後圖像，像拉上窗簾一般。有關細節，(➔ 76)。

❷ **混合狀態**[MIX]
該功能將在新場景圖像的淡入中，使以前拍攝的最後圖像逐漸淡出。有關細節，(➔ 78)。

❸ **頻閃狀態**[STROBE]
可用頻閃觀測儀一般的效果拍攝圖像。

❹ **超高靈敏度狀態**[GAINUP]
該功能會電子性地增加圖像的亮度。
- 該狀態中，手動調節聚焦。
- ♦ 在用超高靈敏度功能進行拍攝中，可能會發生某些殘像失真。

❺ **底片/正片狀態**[NEGA]
拍攝圖像的色彩被顛倒，類似於照相底片。

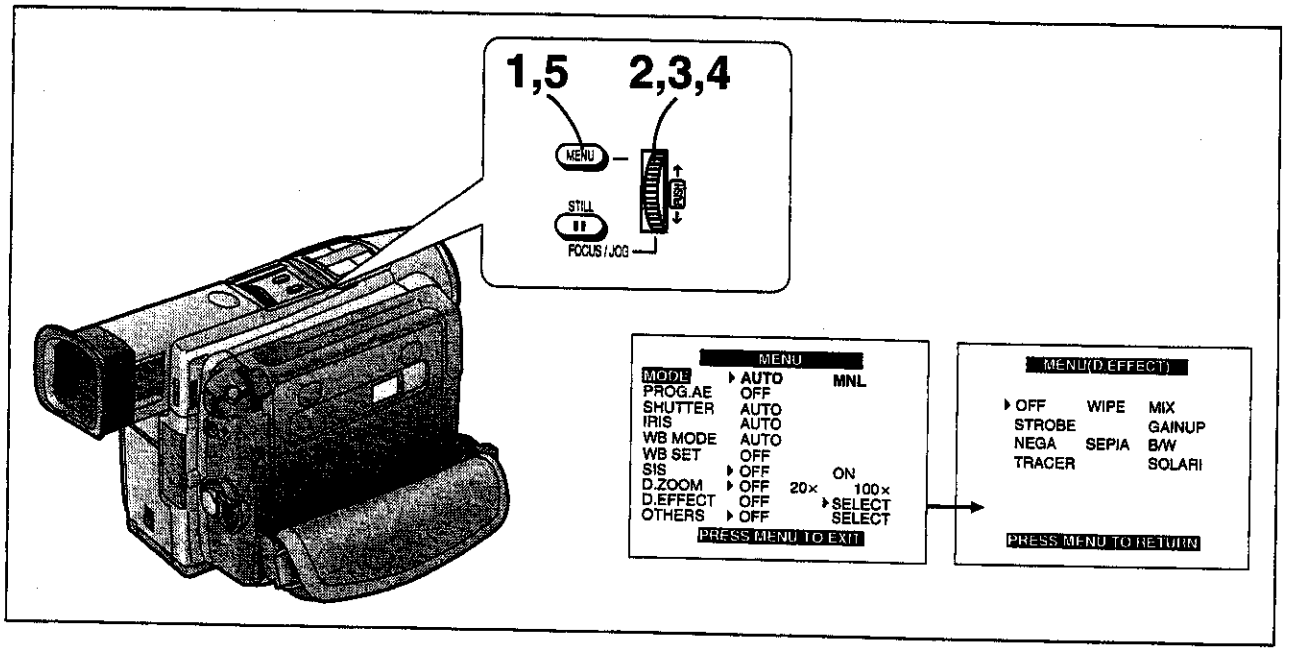
❻ **舊片狀態**[SEPIA]
用類似於舊照片之色彩的棕色調拍攝場景。

❼ **單色狀態**[B/W]
將用黑白色來拍攝圖像。

❽ **拖影效果狀態**[TRACER]
用拖影效果拍攝圖像。

❾ **反轉狀態**[SOLARI]
將用反轉的色彩拍攝圖像。

♦ 在超級圖像穩定功能或數位變焦功能啟動中，將無法使用數位效果。
若想使用數位效果時，須將菜單上的[D.ZOOM] (數位變焦) 和[SIS] (數位圖像穩定) 都設置在[OFF]。



ENGLISH

Recording with Special Effects
(Digital Effects) (Continued)

Selecting the Desired Digital Effect

1 Press the [MENU] Button.
The Menu appears.

2 Turn the [PUSH] Dial to select [D.EFFECT].
- Set [D.ZOOM] and [SIS] on the Menu to [OFF], otherwise you cannot select a Digital Effect.

3 Press the [PUSH] Dial to select [SELECT].
The [MENU (D.EFFECT)] Menu appears.

4 Press the [PUSH] Dial to select the desired digital effect.

5 Press the [MENU] Button twice to exit the Menu.
- The picture has the selected digital effect now. However, the effect of the Wipe Function and the Mix Function only become visible when actually recording in the respective mode. (➔ 76, 78)

- If you select [GAINUP] on the [MENU (D.EFFECT)] Menu after adjusting the shutter speed manually or if you select either [ ] or [ ] (➔ 68) for [PROG.AE], the selected shutter speed (➔ 84) or the Programme AE Mode is cancelled.

Cancelling the Digital Effect
Set [D.EFFECT] on the Menu to [OFF].

中文

用特殊效果拍攝 (數位效果) (接上頁)

選擇需要的數位效果時

1 按[MENU](菜單)鈕。
即出現菜單。

2 轉動[PUSH](下按)環，選擇[D.EFFECT](數位效果)。
- 應將菜單上的[D.ZOOM](數位變焦)和[SIS](數位圖像穩定)都設置在[OFF]，否則，將無法選擇數位效果。

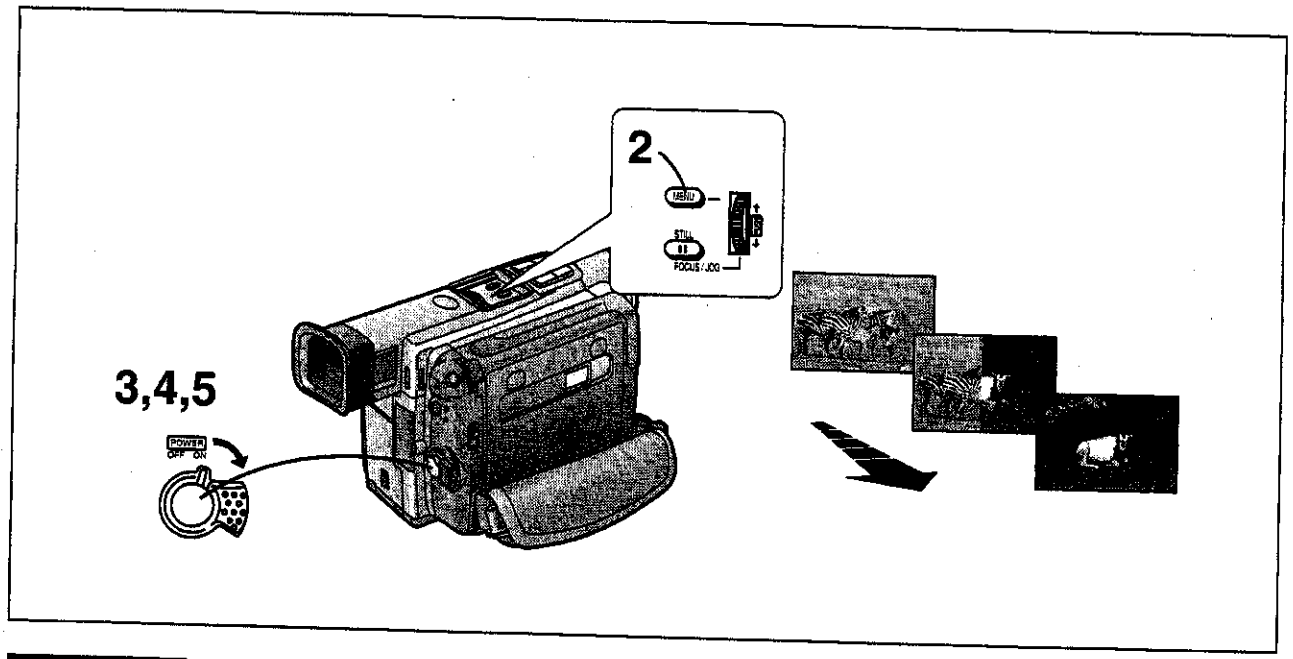
3 按[PUSH]環，選擇[SELECT](選擇)。
將出現[MENU (D.EFFECT)]菜單。

4 按[PUSH]環，選擇需要的數位效果。

5 按[MENU]鈕2次，退出菜單。
- 圖像即會具備所選擇的效果。
然而，只有相應的狀態下進行實際拍攝時，才能見到劃變功能和混合功能的效果。(➔ 76, 78)

- 如果您在手動調節了快門速度之後，選擇了[MENU](D.EFFECT)菜單中的[GAINUP](超高靈敏度)，或選擇了[PROG.AE](程序AE)所用的[ ][ ](➔ 68)時，所選擇的快門速度(➔ 84)和程序AE狀態將被取消。

取消數位效果時
將菜單上的[D.EFFECT]設置在[OFF]。



ENGLISH

Recording with Special Effects
(Digital Effects) (Continued)

■ Wipe Mode
It gradually replaces a still picture of the last recorded scene with the moving picture of the new scene, like drawing the curtain.

After performing steps 1-3 on page 74:

1 Select [WIPE] on the [MENU (D.EFFECT)] Menu. (➔ 74)

2 Press the [MENU] Button twice to exit the Menu.

3 Press the Start/Stop Button to start recording.
The normal recording starts.

4 Press the Start/Stop Button to pause recording.
The last picture is stored in memory.

5 Press the Start/Stop Button to start recording again.
The last picture of the previous scene is gradually replaced by the new scene.

中文

用特殊效果拍攝（數位效果）（接上頁）

■ 劃變狀態
該功能可用新場景的圖像逐漸取代以前拍攝的最後圖像，像拉上窗簾一般。

完成第74頁上的步驟1～3後：

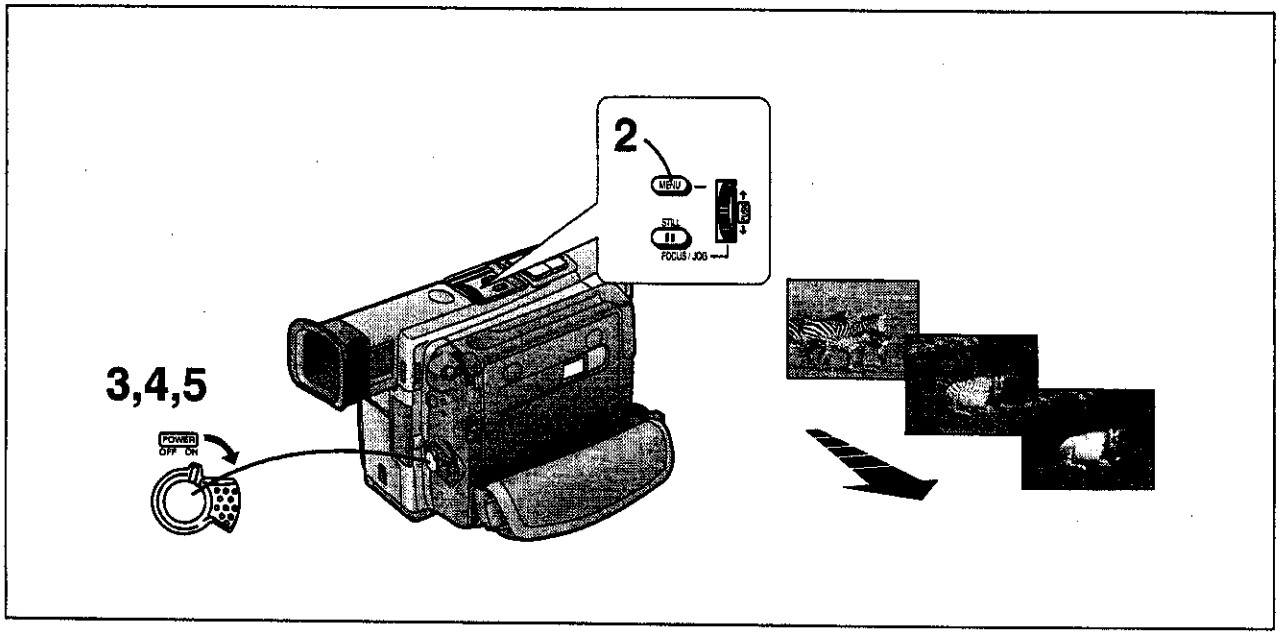
1 選擇[MENU (D.EFFECT)]菜單上的[WIPE]（劃變）。(➔ 74)

2 按[MENU]（菜單）鈕2次，退出菜單。

3 按啟動/停止鈕，開始拍攝。
將開始普通拍攝。

4 按啟動/停止鈕，暫停拍攝。
最後的圖像將被保存在記憶中。

5 按啟動/停止鈕，再次開始拍攝。
前場景的最後圖像將逐漸被新場景取而代之。



ENGLISH

Recording with Special Effects
(Digital Effects) (Continued)

■ Mix Mode
It gradually fades out a still picture of the last recorded scene while fading in the moving picture of the new scene.

After performing steps 1-3 on page 74:

1 Select [MIX] on the [MENU (D.EFFECT)] Menu. (➜ 74)

2 Press the [MENU] Button twice to exit the Menu.

3 Press the Start/Stop Button to start recording.
The normal recording starts.

4 Press the Start/Stop Button to pause recording.
The last picture is stored in memory.

5 Press the Start/Stop Button to start recording again.
The last picture gradually fades out while the new scene fades in.

中文

用特殊效果拍攝 (數位效果) (繼續)

■ 混合狀態
該功能將在新場景圖像的淡入中，使以前拍攝的最後圖像逐漸淡出。

完成第74頁上的步驟1～3後:

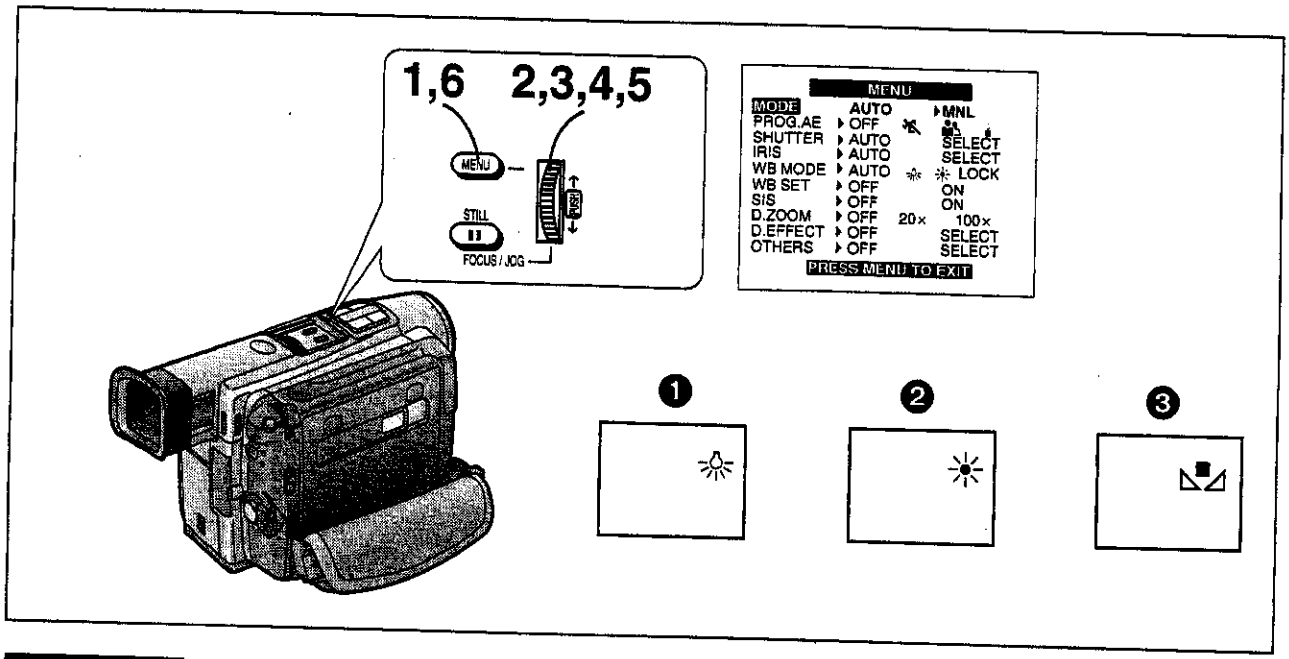
1 選擇[MENU (D.EFFECT)]菜單上的[MIX] (混合)。(➜ 74)

2 按[MENU](菜單)鈕2次，退出菜單。

3 按啟動/停止鈕，開始拍攝。
將開始普通拍攝。

4 按啟動/停止鈕，暫停拍攝。
最後的圖像將被保存在記憶中。

5 按啟動/停止鈕，再次開始拍攝。
在新場景淡入中，最後的圖像將逐漸淡出。



ENGLISH

Recording with Natural Colours
(White Balance)

This Movie Camera automatically adjusts the white balance to ensure that the pictures are recorded with natural colours. For certain types of subjects and lighting conditions, however, this Auto White Balance Adjustment Mode may not be able to ensure natural colours (➔ 150, 152). In these cases, adjust the white balance manually.

1 Press the [MENU] Button.
The Menu appears.

2 Turn the [PUSH] Dial to select [MODE].

3 Press the [PUSH] Dial to select [MNL].

4 Turn the [PUSH] Dial to select [WB MODE].

5 Press the [PUSH] Dial to select the desired mode.
The following White Balance Mode settings are possible:
❶ Indoor (incandescent Lamp) Mode (☆)
❷ Outdoor Mode (☀)
❸ Lock Mode (■)
If you set [WB MODE] on the Menu to [LOCK], it is necessary to set [WB SET] on the Menu to [ON] and adjust the white balance manually.(➔ 82)

6 Press the [MENU] Button to exit the Menu.
♦ If you select [GAINUP], [SEPIA] or [B/W] on the [MENU (D.EFFECT)] Menu, you cannot select or change the White Balance Mode.

Returning to the Auto White Balance Mode
Set [WB MODE] on the Menu to [AUTO].

中文

用自然色彩拍攝（白色平衡）

該攝錄影機會自動調節白色平衡，以確保用自然色彩來拍攝圖像。然而，對於某些類型的目標物和燈光條件，該自動白色平衡調節狀態可能無法確保自然色彩 (➔ 150，152)。在此情況下，請手動調節白色平衡。

1 按[MENU](菜單)鈕。
即出現菜單。

2 轉動[PUSH](下按)環，選擇[MODE](狀態)。

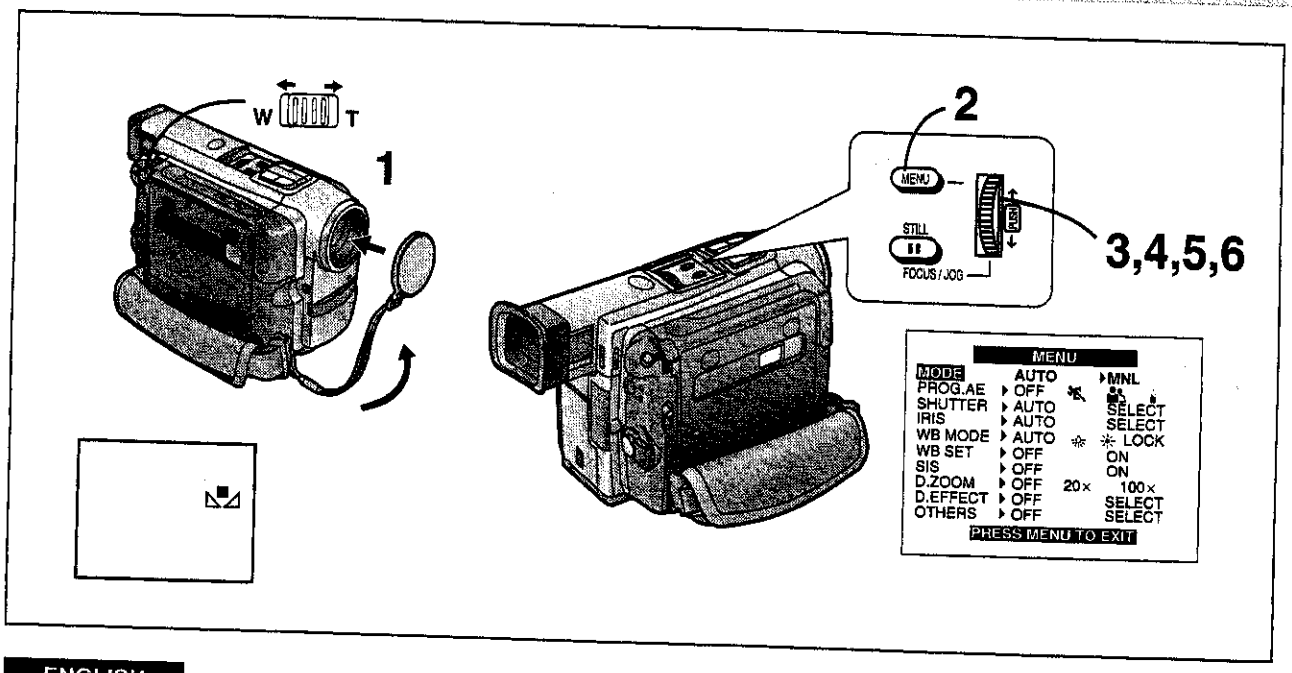
3 按[PUSH]環，選擇[MNL](手動)。

4 轉動[PUSH]環，選擇[WB MODE](白色平衡狀態)。

5 按[PUSH]環，選擇需要的狀態。
可進行下列白色平衡狀態設定：
❶ 室內 (白熾燈) 狀態 (☆)
❷ 室外狀態 (☀)
❸ 鎖定狀態 (■)
如果您將菜單上[WB MODE] (白色平衡狀態) 設定為[LOCK] (鎖定) 時，則有必要將菜單上的[WB SET] (白色平衡設定) 設定為[ON]，並手動調節白色平衡。(➔ 82)

6 按[MENU]鈕，退出菜單。
♦ 如果您在[MENU (D.EFFECT)]菜單上，選擇了[GAINUP] (超高靈敏度)、[SEPIA] (舊片) 或[B/W] (單色) 時，將無法選擇或改變白色平衡狀態。

恢復自動白色平衡狀態時
將菜單上的[WB MODE]設定為[AUTO] (自動)。



ENGLISH

Adjusting the White Balance Manually

Use the Manual White Balance Adjustment Mode for all types of lighting outside the range ❶ (➜ 152), as the Auto White Balance Adjustment Mode can only ensure natural colours for the types of lighting within that range. For optimum results under almost any types of lighting, we recommend that you adjust the white balance manually for each new scene, as professionals do.

1 Attach the Lens Cap and zoom in until the entire screen becomes white.

2 Press the [MENU] Button.
The Menu appears.

3 Turn the [PUSH] Dial to select [MODE].

4 Press the [PUSH] Dial to select [MNL].

5 Turn the [PUSH] Dial to select [WB SET].

6 Aim the Movie Camera to the subject and press the [PUSH] Dial to select [ON].

- When the [ ] Indication stops flashing and remains lit, the Manual White Balance Adjustment is finished. If you want to use this setting again later on, for example after having used Automatic White Balance Adjustment, you can recall it by setting [WB MODE] to [LOCK] on the Menu. (In this case, the [ ] Indication flashing.)
- When the [ ] Indication remains flashing under weak illumination, manually adjusting the white balance is not possible.

Returning to the Auto White Balance Adjustment Mode
Set [WB MODE] on the Menu to [AUTO].

中文

手動調節白色平衡

由於自動白色平衡調節狀態 (➜ 152) 只能確保該範圍之內的燈光類型能夠獲得自然色彩，所以，對於範圍 ❶ 之外的所有其它類型的燈光，請使用手動白色平衡調節狀態。為了幾乎所有的類型的燈光下都能獲得良好的結果，建議您像專家一樣，對每個新場景都進行手動白色平衡調節。

1 裝上鏡頭蓋，進行拉近，直至整個屏幕變成白色。

2 按[MENU](菜單)鈕。
即出現菜單。

3 轉動[PUSH](下按)環，選擇[MODE](狀態)。

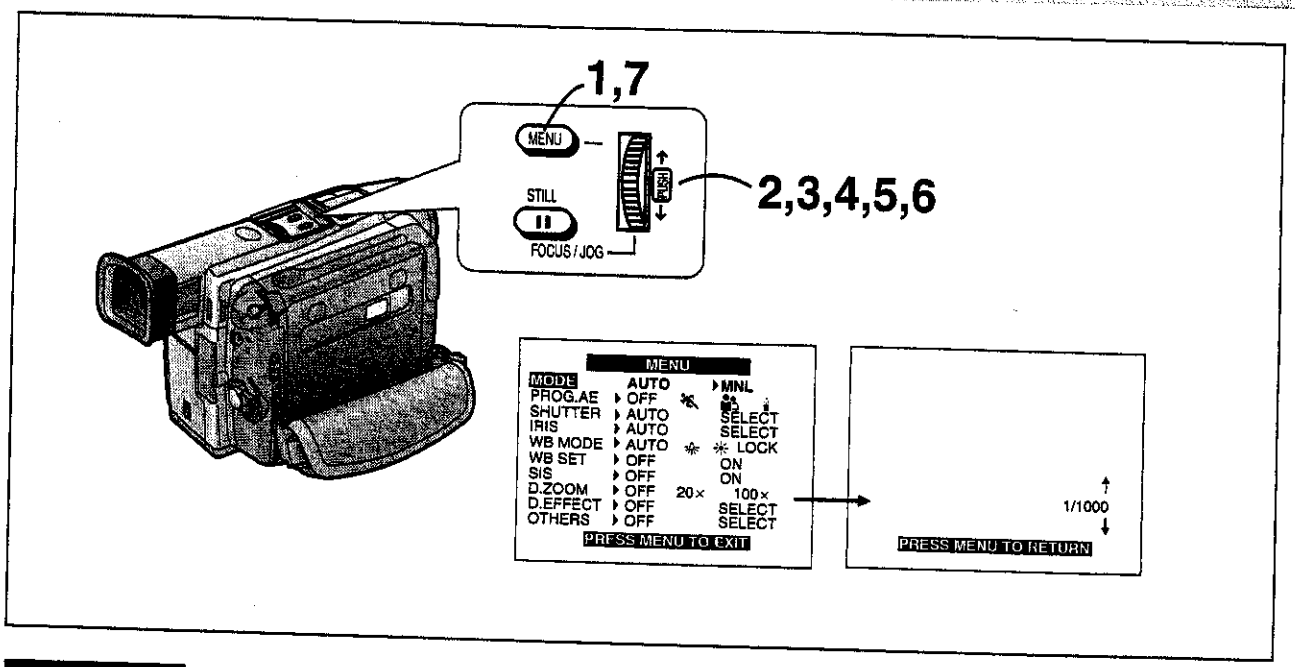
4 按[PUSH]環，選擇[MNL](手動)。

5 轉動[PUSH]環，選擇[WB SET](白色平衡設定)。

6 將攝錄影機瞄準目標物，然後按[PUSH]環，選擇[ON]。

- 當[ ]指示停止閃爍並保持亮起時，說明白色平衡調節已經結束。如果您以後，如已經使用了自動白色平衡調節後，想重新使用該設定時，請將菜單上的[WB MODE](白色平衡狀態)設置為[LOCK](鎖定)項，可調出該設定。(在此情況下，[ ]指示燈會閃爍。)
- 當[ ]指示燈持續閃爍時，說明在弱光之下，無法設定手動白色平衡調節。

恢復自動白色平衡調節狀態時
將菜單上的[WB MODE]設定為[AUTO](自動)。



ENGLISH

Adjusting the Shutter Speed Manually

To achieve special creative effects or to cope with special lighting situations or fast-action scenes, you can adjust the shutter manually.

1 Press the [MENU] Button.
The Menu appears.

2 Turn the [PUSH] Dial to select [MODE].

3 Press the [PUSH] Dial to select [MNL].

4 Turn the [PUSH] Dial to select [SHUTTER].
If you set [PROG.AE] to any setting other than [OFF], you cannot select [SHUTTER].

5 Press the [PUSH] Dial to select [SELECT].

6 Turn the [PUSH] Dial to adjust the shutter speed.

7 Press the [MENU] Button twice to exit the Menu.
The indication of the selected shutter speed appears.

Range of Shutter Speed Adjustment
1/50–1/8000 s
The standard shutter speed is 1/50 s.
The nearer to [1/8000] a setting you select, the faster the shutter speed becomes.

Returning to the Normal Shutter Speed
Set [MODE] on the Menu to [AUTO].

中文

手動調節快門速度

為了獲得特殊創新效果或為了對應特殊燈光條件或快動場景，可手動調節快門速度。

1 按[MENU](菜單)鈕。
即出現菜單。

2 轉動[PUSH](下按)環，選擇[MODE](狀態)。

3 按[PUSH]環，選擇[MNL](手動)。

4 轉動[PUSH]環，選擇[SHUTTER](快門)。
如果您將[PROG.AE](程序AE)設定為[OFF]以外的任何值時，則將無法選擇[SHUTTER]。

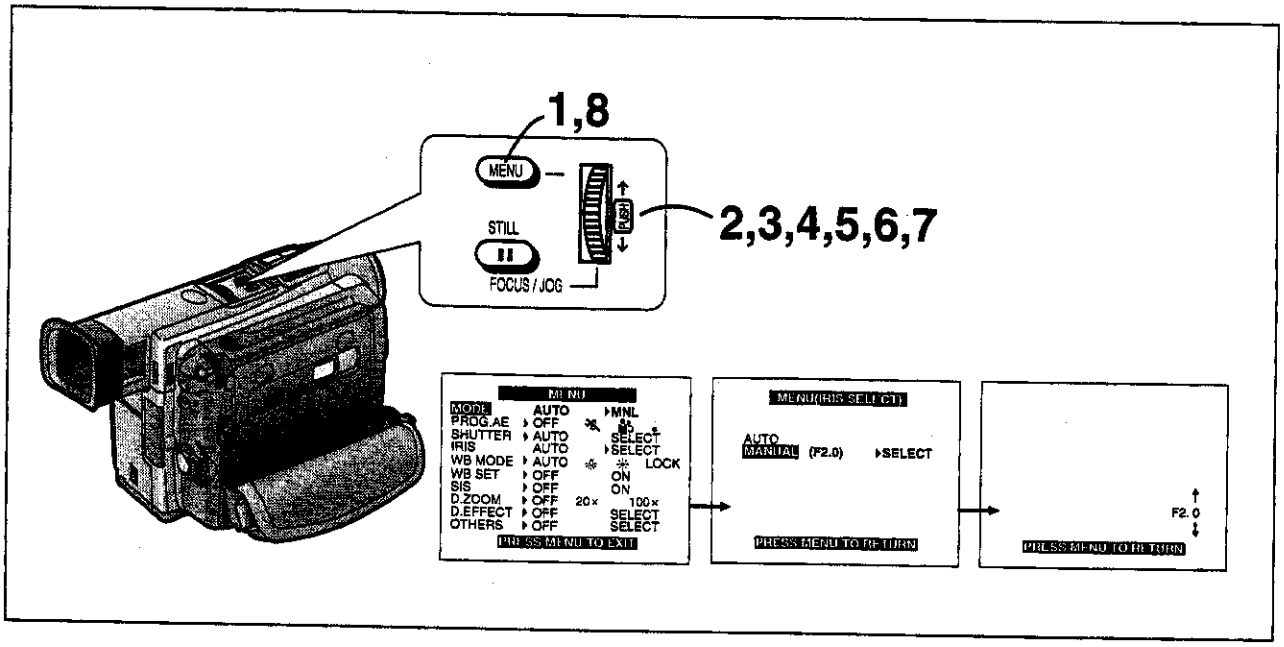
5 按[PUSH]環，選擇[SELECT](選擇)。

6 轉動[PUSH]環，調節快門速度。

7 按[MENU]鈕2次，退出菜單。
將出現所選擇的快門速度指示。

快門速度的調節範圍
1/50 ~ 1/8000秒
標準快門速度為1/50秒。
您選擇的設定越靠近[1/8000]，快門速度將越快。

恢復普通的快門速度時
將菜單上的[MODE]設定為[AUTO](自動)。



ENGLISH

Adjusting the Iris (F Number) Manually

To achieve special creative effects or to cope with special lighting situations or fast-action scenes, you can adjust the iris (F number) manually.

1 Press the [MENU] Button.
The Menu appears.

2 Turn the [PUSH] Dial to select [MODE].

3 Press the [PUSH] Dial to select [MNL].

4 Turn the [PUSH] Dial to select [IRIS].

5 Press the [PUSH] Dial to select [SELECT].
The Manual Iris Adjustment Menu [MANUAL(IRIS SELECT)] appears.

6 Turn the [PUSH] Dial to select [MANUAL] and then press the [PUSH] Dial.
The Manual Iris Adjustment Menu appears.

7 Turn the [PUSH] Dial to adjust the iris value (F number).

8 Press the [MENU] Button twice to exit the Menu.
The indication of the selected iris value (F number) appears.

Range of Iris adjustment

CLOSE (Closed) ➜ F16.0 ... F1.7 ➜ OP (Opened)
+0dB...+18dB
The nearer to [CLOSE] a value you select, the darker the picture becomes.
The nearer to [OP] a value you select, the brighter the picture becomes.
The figures with +dB show the Gain-up value. If you increase the value too much, the picture deteriorates.

Returning to the Normal Iris Value (F Number)

Set [MODE] on the Menu to [AUTO].

中文

手動調節光圈 (F數字)

為了獲得特殊創新效果或為了對應特殊燈光條件或快動場景，可手動調節光圈 (F數字)。

1 按[MENU](菜單)鈕。
即出現菜單。

2 轉動[PUSH](下按)環，選擇[MODE](狀態)。

3 按[PUSH]環，選擇[MNL](手動)。

4 轉動[PUSH]環，選擇[IRIS](光圈)。

5 按[PUSH]環，選擇[SELECT](選擇)。
將出現手動光圈調節菜單[MANUAL (IRIS SELECT)]。

6 轉動[PUSH]環，選擇[MANUAL](手動)，並按[PUSH]環。

7 轉動[PUSH]環，調節光圈值(F數字)。

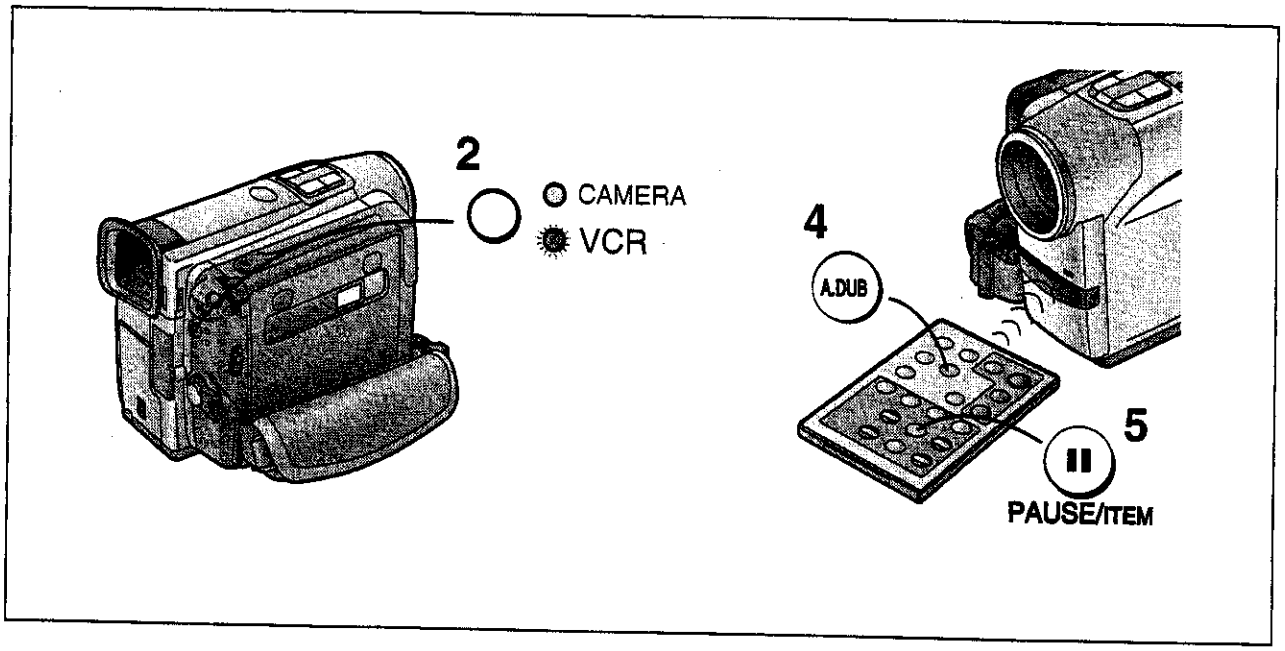
8 按[MENU]鈕2次，退出菜單。
將出現所選擇的光圈值 (F數字) 的指示。

光圈的調節範圍

CLOSE (關閉) ➜ F16.0 ... F1.7 ➜ OP (打開) ➜ +0dB ... +18dB
您選擇的值越靠近[CLOSE]，圖像將變得越暗。
您選擇的值越靠近[OP]，圖像將變得越亮。
帶+dB的數字表示超高靈敏度值。如果數值被增加得過分時，會降低畫質。

恢復普通的光圈值(F數字)時

將菜單上的[MODE]設定為[AUTO](自動)。



ENGLISH

Adding New Sound on a Recorded Cassette

(Audio Dubbing)

To perform audio dubbing, the Remote Controller is necessary.

You can add music or narration to a recorded cassette.

- **If [AUDIO REC] on the [MENU (OTHERS)] Menu has been set to [16bit], performing audio dubbing will completely erase the previously recorded sound.** Therefore, if you intend to perform audio dubbing but also want to keep the original sound, be sure to set [AUDIO REC] on the [MENU (OTHERS)] Menu to [12bit] before making the original recording.
- It is not possible to perform audio dubbing onto recordings made in the LP Mode. (➔24)

1 Insert the recorded cassette and set the [POWER ON/OFF] Switch to [ON].

2 Press the [VCR/CAMERA] Button so that the [VCR] Lamp lights.

3 At the point where you want to insert the sound, switch the Movie Camera over to the Still Playback Mode.

4 Press the [A.DUB] Button on the Remote Controller.

5 Press the Pause Button [❚❚] on the Remote Controller to start audio dubbing.

Stopping Audio Dubbing

Press the Pause Button [❚❚] on the Remote Controller. The Movie Camera is again in the Still Playback Mode.

中文

在已拍錄影帶上增添新的聲音

(音頻拷貝)

進行音頻拷貝，需要有遙控器。

可以在已拍錄影帶上添加音樂和解說。

- **如果[MENU (OTHERS)]菜單上的[AUDIO REC](音頻拷貝)項，被設置在[16位]時，若進行音頻拷貝，將會完全抹消以前拍攝的聲音。**
  所以，當您打算進行音頻拷貝，但也想保住原來的聲音時，必須於當初拍攝之前，將[MENU (OTHERS)]菜單上的[AUDIO REC]設置在[12位]。
- 不能在已經用LP狀態拍攝的內容上進行音頻拷貝(➔24)。

1 插入已拍錄影帶，將[POWER ON/OFF]開關設置在[ON]。

2 按[VCR/CAMERA](錄放影機/攝錄影機)鈕，使[VCR]燈亮起。

3 在您打算插入聲音之點，將攝錄影機切換至靜止放影狀態。

4 按遙控器上的[A.DUB](音頻拷貝)鈕。

5 按遙控器上的暫停[❚❚]鈕，開始音頻拷貝。

停止音頻拷貝時

按遙控器上的暫停[❚❚]鈕。攝錄影機將再次處於靜止放影狀態。

ENGLISH

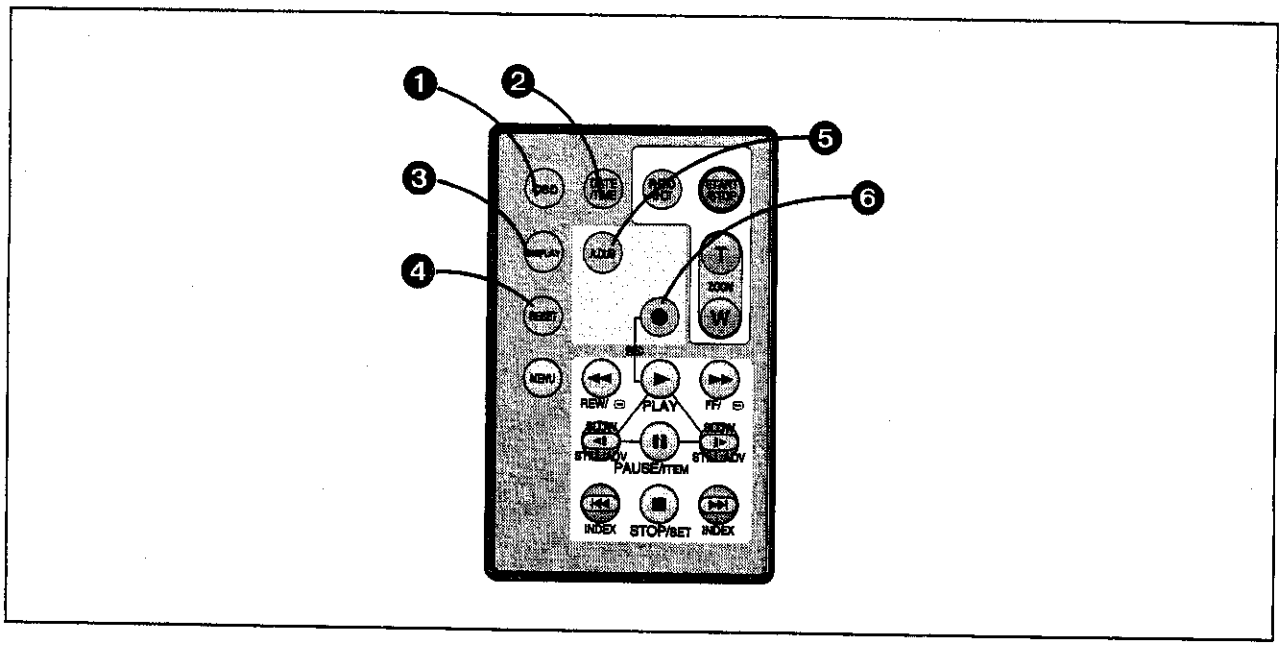
Playing Back the Sound Recorded with Audio Dubbing

- If you set [AUDIO REC] on the [MENU (OTHERS)] Menu to [12bit] for the original recording, the sound added with audio dubbing and the original sound are played back as follows depending on the setting of [AUDIO OUT] on the VCR Mode Menu (➜ 118, 124):
  - ST1: The original sound alone is played back.
  - ST2: The dubbed sound alone is played back.
  - MIX: The original sound and the sound added with audio dubbing are played back together.
- **Do not perform audio dubbing onto unrecorded parts of the tape. This could cause the playback picture and sound to be distorted.**
- If you reset the Tape Counter to zero at the point where you want the audio dubbing to end and turn on the memory Stop Function (➜154), the audio dubbing automatically stops when the tape reaches that point.

中文

播放用音頻拷貝錄製的聲音

- 如果您在當初的拍攝中，將[MENU (OTHERS)]菜單上的[AUDIO REC] (音頻錄製) 設置在[12位]，則可用音頻拷貝功能添加聲音，並可根據錄放影機狀態菜單上的[AUDIO OUT] (音頻輸出) 的設定，播放原來的聲音 (➜118，124)：
  - ST1：僅播放原來的聲音；
  - ST2：僅播放拷貝的聲音；
  - MIX：將一起播放原來的聲音和音頻拷貝添加的聲音。
- **不能在錄影帶上未拍的部分上進行音頻拷貝。否則，將導致播放的圖像和聲音失真。**
- 如果您在將要結束音頻拷貝之點，將磁帶計數器復原至零，並啟動了記憶停止功能 (➜154)，當錄影帶到達此點時，音頻拷貝會自動停止。



ENGLISH

Remote Controller

Using the wireless Remote Controller supplied with the Movie Camera allows operating most of the Movie Camera's major functions from a distance.

Buttons on the Remote Controller

❶ Indication Output Button [OSD] (➔ 52)
To display the function and operation indications on a connected TV.

❷ Date and Time Button [DATE/TIME] (➔ 44)
To make the Date/Time Indication appear or disappear in the picture during recording and playback .

❸ Indication Shift Button [DISPLAY] (➔ 162)
To change the indications.

❹ Reset Button [RESET] (➔ 154)
To reset the Tape Counter to zero.

❺ Audio Dubbing Button [A.DUB] (➔ 88)
To perform audio dubbing.

❻ Recording Button [REC] (➔ 104)
To dub digital signals input into the Movie Camera via the DV Input/Output Terminal, press the [REC] Button and the [PLAY] Button together.

中文

遙控器

使用該攝錄影機附帶的無線遙控器，可讓您在遠處操作該攝錄影機的大多數主要功能。

遙控器的按鈕

❶指示輸出鈕[OSD] (➔ 52)
可在連接的電視機上顯示功能和操作指示。

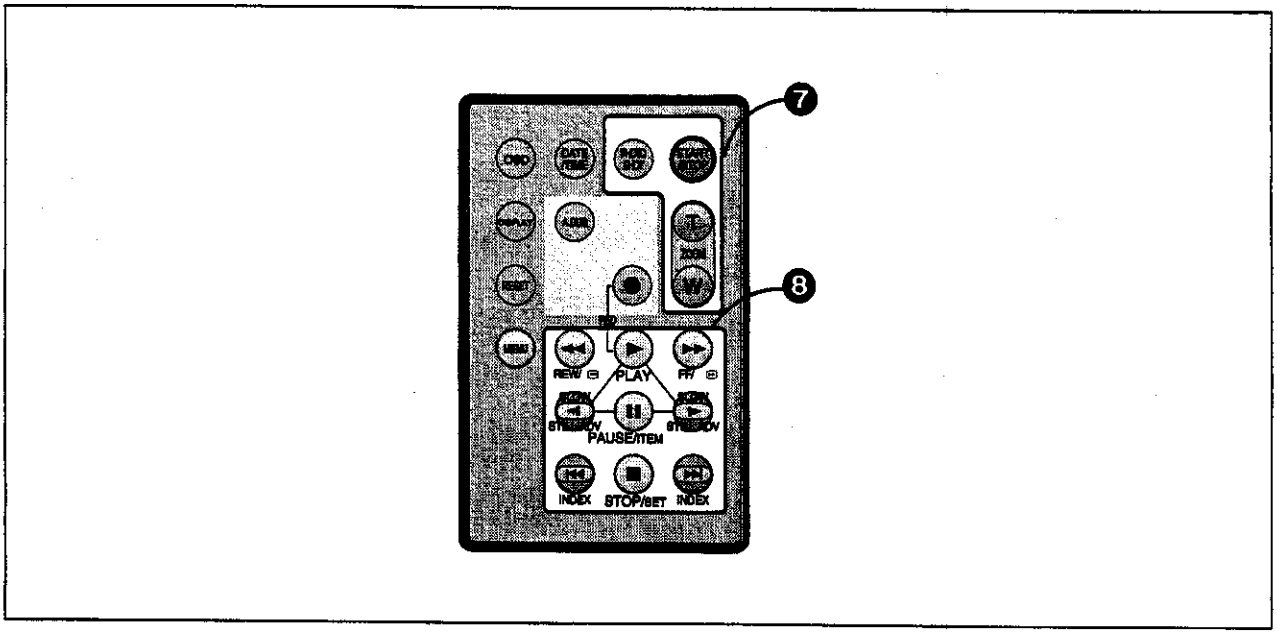
❷日期和時間鈕[DATE/TIME] (➔ 44)
在拍攝和放影中，使日期/時間指示在圖像中出現或消失。

❸指示移動鈕[DISPLAY] (➔ 162)
可改變指示。

❹復原鈕[RESET] (➔ 154)
可使磁帶計數器復原至零。

❺音頻拷貝鈕[A.DUB] (➔ 88)
可進行音頻拷貝。

❻錄影鈕[REC] (➔ 104)
當您用DV (數位影像) 輸入/輸出端子，將數位信號輸入攝錄影機進行拷貝時，請同時按[REC]和[PLAY] (放影) 鈕。



ENGLISH

❼ Controls for Recording and Sound Volume

Photoshot Button [PHOTO SHOT] (➜ 38)
To record still pictures.

Recording Start/Stop Button [START/STOP] (➜ 30)
To start and pause recording.

Zoom Buttons [ZOOM]
To zoom in and out. (➜ 36)

❽ Controls for Playback/Menu Setting

Rewind/Review Button [◀◀]
To start review playback (➜ 46) if pressed during normal playback; and to rewind the tape if pressed in the Stop Mode.
Also to activate the Camera Search Function (➜ 56) in reverse direction if kept pressed in the Recording Pause Mode. Pressing it briefly activates the Recording Check Function (➜ 32).

Fast-forward/Cue Button [▶▶]
To start cue playback (➜ 46) if pressed during normal playback; and to fast-forward the tape if pressed in the Stop Mode.
Also to activate the Camera Search Function (➜ 56) in forward direction if kept pressed in the Recording Pause Mode.

Play Button [▶] (➜ 44)
To start playback.

中文

❼拍攝和音量控制

拍照鈕[PHOTOSHOT](➜38)
可拍攝靜止圖像。

拍攝啟動/停止鈕[START/STOP](➜30)
可開始和暫停拍攝。

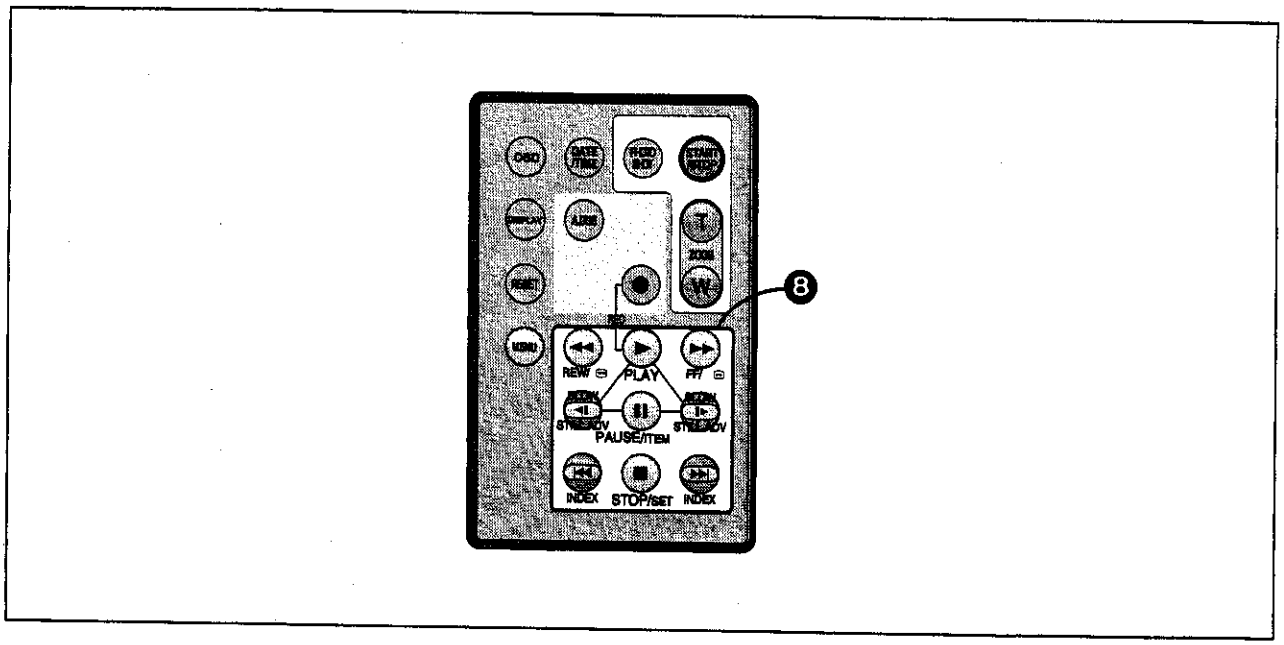
變焦鈕[ZOOM]
可拉近和拉遠。(➜36)

❽放影/菜單設定控制

倒帶/倒帶尋影鈕[◀◀]
在普通放影中，如果按該鈕，會開始倒帶尋影播放 (➜46)；在停止狀態下按該鈕時，會倒轉錄影帶。
在拍攝暫停狀態下，按住該鈕時，也可啟動反向攝錄影機尋影功能 (➜56)。短暫按該鈕，可啟動拍攝檢查功能 (➜32)。

快進/快進尋影鈕[▶▶]
在普通放影中，如果按該鈕，會進行快進尋影播放 (➜46)；在停止狀態下按該鈕時，會快進錄影帶。
在拍攝暫停狀態下，按住該鈕時，也可啟動正向攝錄影機尋影功能 (➜56)。

放影鈕[▶](➜44)
可開始放影。



ENGLISH

❽ Slow Motion/Still Advance Button [◂I , I▸] (➜ 48,50)

To perform Slow Motion Playback if pressed in the Normal Playback Mode; and to perform Still Advance Playback if pressed in the Still Playback Mode.
(◂I: in reverse direction, I▸: in forward direction)

Index Search Button [I◂◂ , ▸▸I] (➜ 62,64)

To search for recorded scenes marked with an index signal and for still images recorded in the Photoshot Mode.
(I◂◂ : in reverse direction, ▸▸I : in forward direction)

Stop Button [■] (➜ 44)

To stop the tape.

Pause Button [❚❚] (➜50)

To pause playback. The playback picture stands still.

Using the Menu Button

Pressing the Menu Button displays the Menu.
In this case, the functions of the following buttons are changed:

Pause Button → Item Button
To select items on the Menu.

Stop Button → Setting Button
To set the mode for the selected item.

♦ The iris and the shutter speed cannot be adjusted with the Remote Controller. If you want to adjust them manually, use the [PUSH] Dial on the Movie Camera. (➜ 84, 86)

中文

❽慢動作/靜止步進鈕[◂I , I▸](➜ 48,50)

在普通放影狀態下按該鈕時，可進行慢動作放影;若在靜止放影狀態下按該鈕，則會進行靜止步進放影。
(◂I: 反向; I▸: 正向)

索引尋影鈕[I◂◂ , ▸▸I](➜ 62,64)

可尋影帶有索引信號標誌的已拍場景和在拍照狀態下拍攝的靜止圖像。
(I◂◂: 反向; ▸▸I: 正向)

停止鈕[■](➜ 44)

可停止錄影帶。

暫停鈕[❚❚](➜ 50)

可暫停放影。播放的圖像會保持不動。
菜單鈕的使用

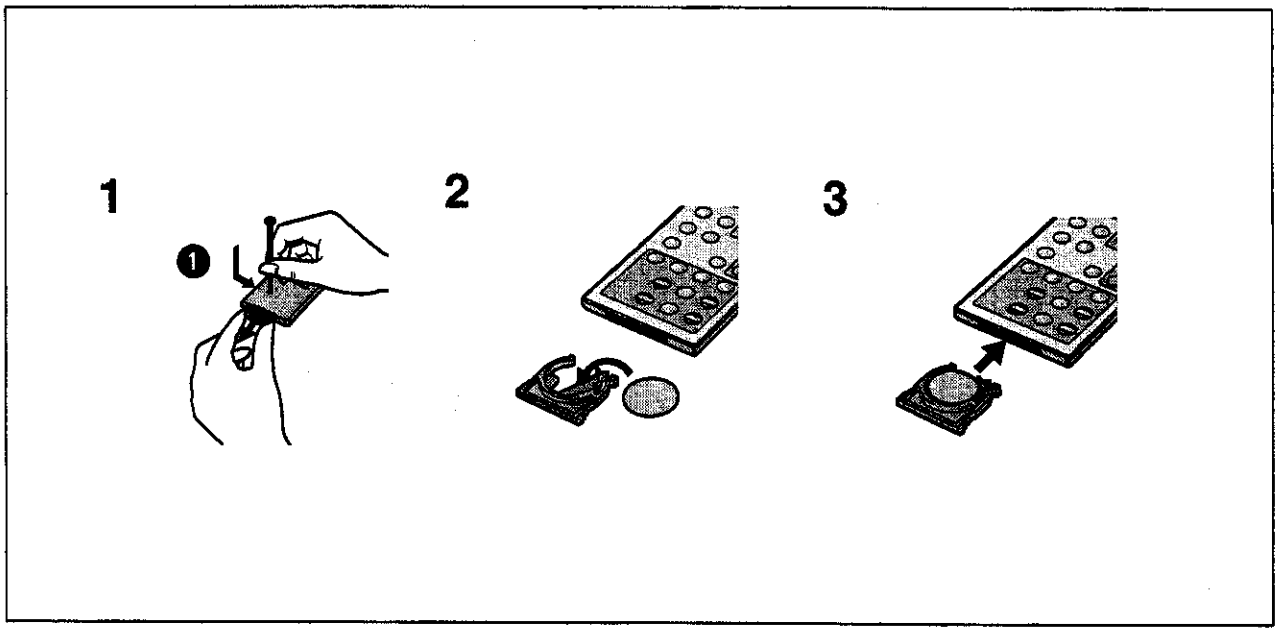
按菜單鈕時，可顯示出菜單。

在此情況下，下列鈕的功能將改變:

暫停鈕 → 項目鈕
可選擇菜單上的項目。

停止鈕 → 設定鈕
可設定所選擇項目的狀態。

♦ 不能用遙控器調節光圈和快門速度。如果您打算手動調節這些功能時，請使用攝錄影機上的[PUSH]環。
(➜84,86)



ENGLISH

Remote Controller
(Continued)

■ Inserting the Button-type Battery
Insert the supplied button-type battery before using the Remote Controller.

1 Pull out the Battery Holder while sliding the Stopper with a pointed object in the direction of the arrow ❶.

2 Insert the button-type battery with the stamped (+) mark facing downward.

3 Insert the Battery Holder into the Remote Controller.

- When the button-type battery is exhausted, replace with a new CR2025 battery.
  (The life of the battery is about 1 year. However, it depends on the frequency of use.)
- ♦ **Keep the button-type battery out of the reach of children.**
- ♦ Make sure you insert the battery with its poles correctly aligned.

中文

遙控器（接上頁）

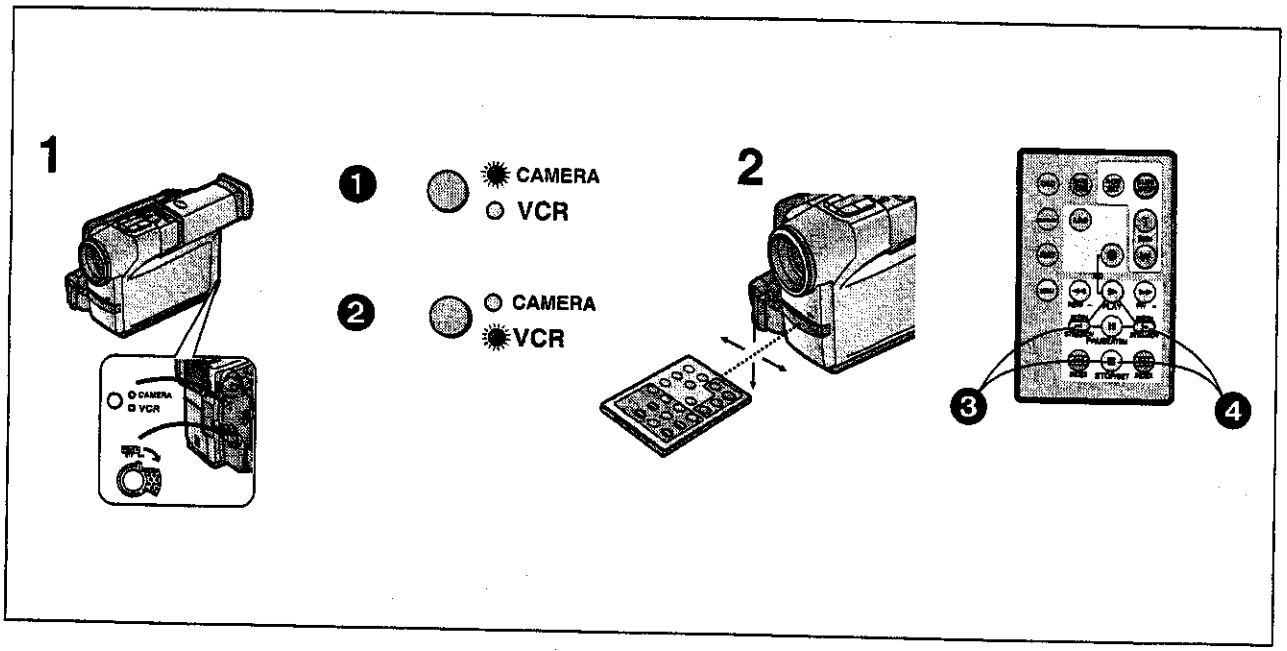
■ 插入鈕扣式電池
使用遙控器之前，請插入附帶的鈕扣式電池。

1 依箭頭❶所示，一邊用尖物品滑動塞子，一邊拉出電池座。

2 將打印著(+)標記的一面朝下，插入鈕扣式電池。

3 將電池座插入遙控器中。

- 當鈕扣式電池耗盡時，請用新CR2025型電池將其更新。
  (電池壽命約為一年。然而，還要看使用頻度。)
- ♦ 勿讓孩子觸摸鈕扣型電池。
- ♦ 插入電池時，須確保其極性正確。



ENGLISH

■Using the Remote Controller

1 Set the [POWER ON/OFF] Switch on the Movie Camera to [ON].

- When the [CAMERA] Lamp lights, you can use the recording functions. ❶
- If you want to use the playback functions, press the [VCR/CAMERA] Button so that the [VCR] Lamp lights. ❷

2 Aim the Remote Controller at the Remote Control Sensor on the Movie Camera and press the appropriate button.

Distance to the Movie Camera: Less than 5 metres.
Angle: Approximately 15° up, down, left and right from centre axis.

♦ The operative range described above is valid for using the Remote Controller indoors.
When using it outdoors or under strong lights, it may not work correctly even within the above range.
● Within a distance of about 1 metre, it is also possible to use the Remote Controller from the side.

Selecting the Remote Controller Mode

When using two Movie Cameras at the same time, selecting different Remote Controller Modes makes it possible to operate them separately.

♦ If the Remote Controller Mode set on the Movie Camera and on its Remote Controller are not matched, the [REMOTE] Indication appears.
♦ Replacing the button-type battery in the Remote Controller automatically resets it to the [VCR1] Mode.
● Set [REMOTE] on the [MENU(OTHERS)] Menu to the desired Remote Controller Mode. (➔118-122)

❸ **Press the [◄I] Button and the [■] Button simultaneously.**
This selects the [VCR2] Mode.

❹ **Press the [I►] Button and the [■] Button simultaneously.**
This selects the [VCR1] Mode.

中文

■使用遙控器

1 將攝錄影機上的[POWER ON/OFF]開關設置在[ON]。

- 當[CAMERA] (攝錄影機) 燈亮起時，便可使用拍攝功能。❶
- 如果您打算使用放影功能時，請按[VCR/CAMERA] (錄放影機/攝錄影機) 鈕，使[VCR]燈亮起。❷

2 將遙控器對準攝錄影機上的遙控感應器，然後按相應的鈕。

離攝錄影機的距離：小於5米。
角度：中心軸上、下、左和右的約15°。

♦ 上述操作範圍適於在室內使用遙控器。
當在室外或強烈光源之下進行使用時，即使處於上述範圍之內，遙控器也可能無法正常工作。
● 在1米的範圍之內，從側面也可使用遙控器。

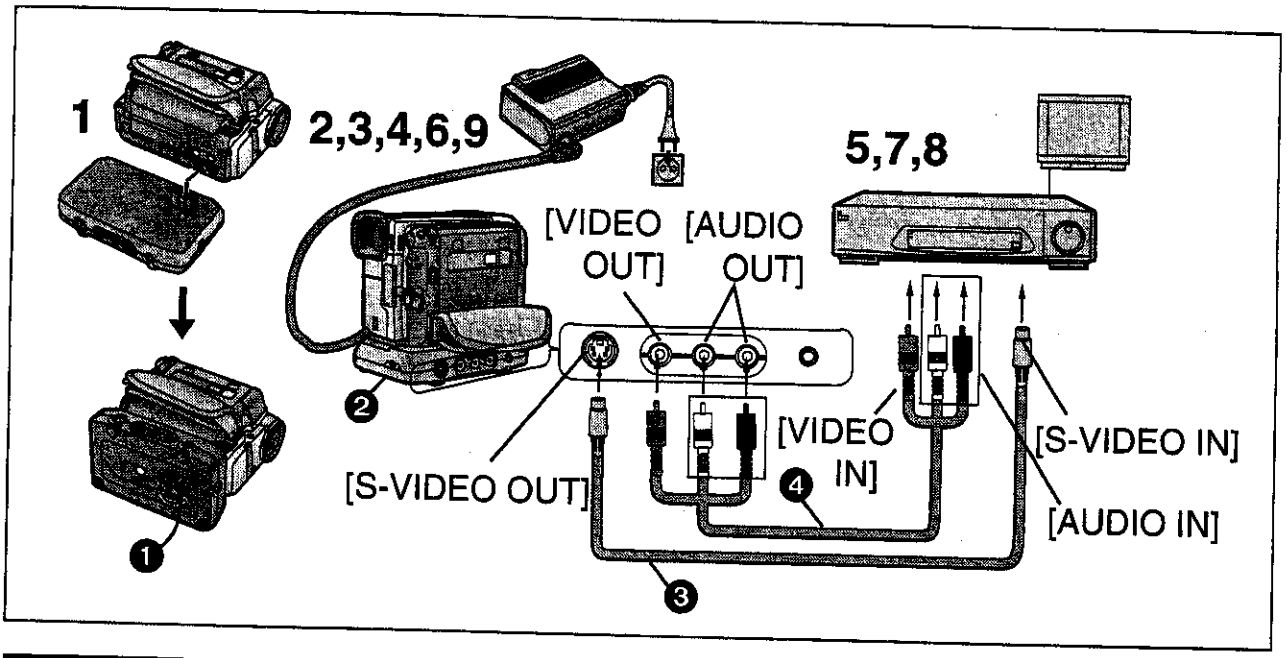
選擇遙控器的狀態

當同時使用兩台攝錄影機時，請選擇不同的遙控器狀態，以便進行分別操作。

♦ 如果攝錄影機上的遙控器狀態設定於遙控器不配時，[REMOTE] (遙控) 指示會出現。
♦ 更換了遙控器的鈕扣式電池時，會自動使其復原至[VCR1]狀態。
● 請將[MENU (OTHERS)]菜單上的[REMOTE]項，設置在需要的遙控器狀態。(➔118~122)

❸ **同時按[◄I]和[■]鈕。**
這將選擇[VCR2]狀態。

❹ **同時按[I►]和[■]鈕。**
這將選擇[VCR1]狀態。



ENGLISH

Copying onto an S-VHS (VHS) Cassette
(Dubbing)

If you attach the Output Terminal Box, you can copy cassettes recorded from this Movie Camera onto S-VHS or VHS cassettes.
After connecting all equipment as shown above, perform the following operations.

1 **Attach the Output Terminal Box to the underside of the Movie Camera with the Screw ❶.**

2 **[Movie Camera]**
Insert the recorded cassette.

3 **[VCR]**
Insert an unrecorded cassette with intact erasure prevention tab.

4 **[Movie Camera]**
Press the Play Button [▶] to start playback.

5 **[VCR]**
Press the Recording Button to start recording.

6 **[VCR]**
Press the Pause or Stop Button to stop recording.

7 **[Movie Camera]**
Press the Stop Button [■] to stop playback.

❷ Output Terminal Box
❸ S-Video Cable
❹ AV Cable

- Before dubbing, press the [OSD] Button (➔ 52) on the Remote Controller so that no indications appear. Otherwise, the Counter Indication and function indications are also recorded onto the cassette.

中文

複製在S-VHS (VHS) 錄影帶上
(拷貝)

安裝了輸出端子箱時，便可將該攝錄影機拍攝的錄影帶拷貝在S-VHS或VHS錄影帶上。
如上圖所示，連接了所有的設備之後，請進行下列操作：

1 **用螺絲❶，將輸出端子箱安裝在攝錄影機的底部。**

2 **[攝錄影機]**
插入拍攝好的錄影帶。

3 **[錄放影機]**
裝上保險片齊全的未拍錄影帶。

4 **[攝錄影機]**
按放影[▶]鈕，開始放影。

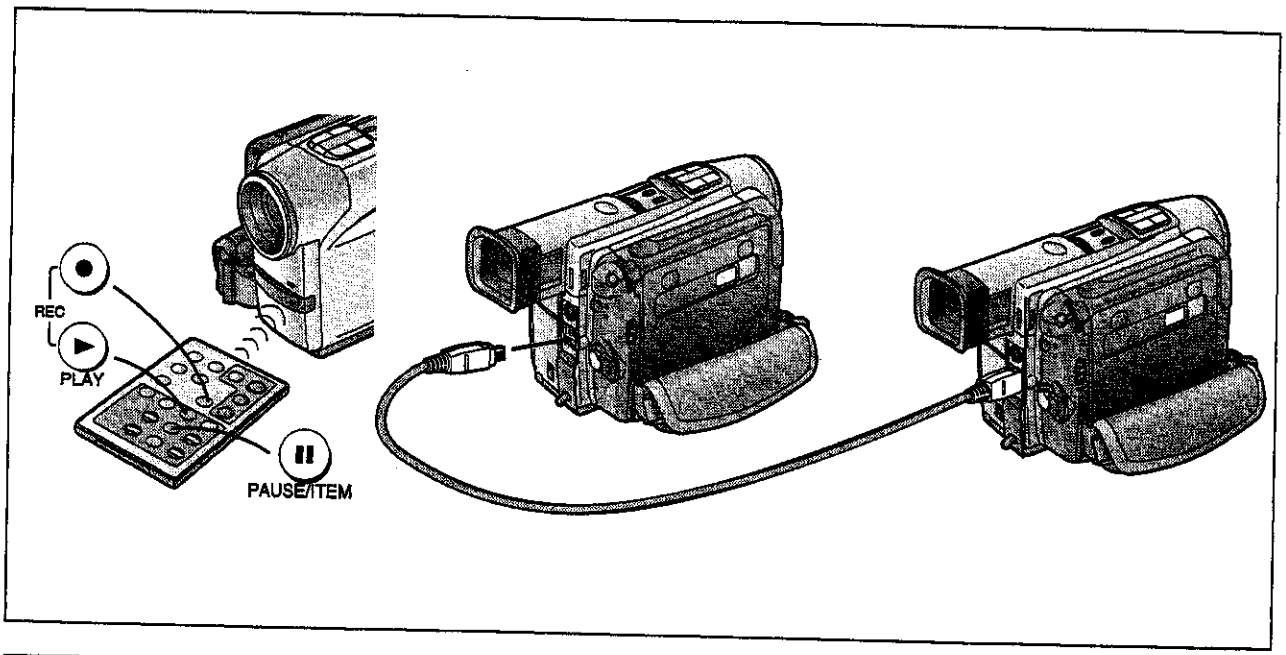
5 **[錄放影機]**
按錄影鈕，開始錄影。

6 **[錄放影機]**
按暫停或停止鈕，停止錄影。

7 **[攝錄影機]**
按停止[■]鈕，停止放影。

❷ 輸出端子箱
❸ S影像纜線
❹ AV纜線

- 拷貝之前，請按遙控器上的[OSD] (屏幕顯示) 鈕 (➔ 52)，使指示消失。否則，計數器指示和功能指示等也將被錄在錄影帶上。



ENGLISH

Using with Digital Video Equipment (Recording)

If you connect this Movie Camera with other Digital Video equipment (for example another Movie Camera of the same type) equipped with DV Input/Output Terminal (IEEE1394) using the DV Cable VW-CD1E (optional), you can dub high-quality picture and sound in the digital format.

1 [Playback Unit]
Insert the recorded cassette and press the [VCR/CAMERA] Button so that the [VCR] Lamp lights.

2 [Recording Unit]
Insert a cassette onto which you want to perform dubbing and press the [VCR/CAMERA] Button so that the [VCR] Lamp lights.

3 [Playback Unit]
Press the Playback Button [▶] to start playback.

4 [Recording Unit]
While pressing the [REC] Button, press the [PLAY] Button (both on the Remote Controller).
Recording starts.

Stopping Recording
Press the Pause Button [❚❚] or the Stop Button [■] to stop recording.

- Regardless of the setting for [AUDIO REC] on the [MENU (OTHERS)] Menu of the recording unit, dubbing is performed in the same audio recording mode as that of the cassette in the playback unit.
- The lower part of the picture may be distorted. However, this is not a malfunction and does not affect the actual recording.
- If you start dubbing without connecting the DV Cable, an Error Message appears, and a random picture may be recorded for a short moment.
- If the playback unit plays back an unrecorded part of the tape, a random picture is recorded.

中文

與數位影像設備配合使用（錄影）

如果您用DV（數位影像）纜線VW-CD1E（另售品），將該攝錄影機與其它具備DV輸入/輸出端子（IEEE1394）的數位影像設備（例如同樣類型的另一台攝錄影機）連接在一起時，便可用數位格式進行高質量的圖像和聲音拷貝。

1 [放影機]
插入已拍錄影帶，按[VCR/CAMERA]（錄放影機/攝錄影機）鈕，使[VCR]燈亮起。

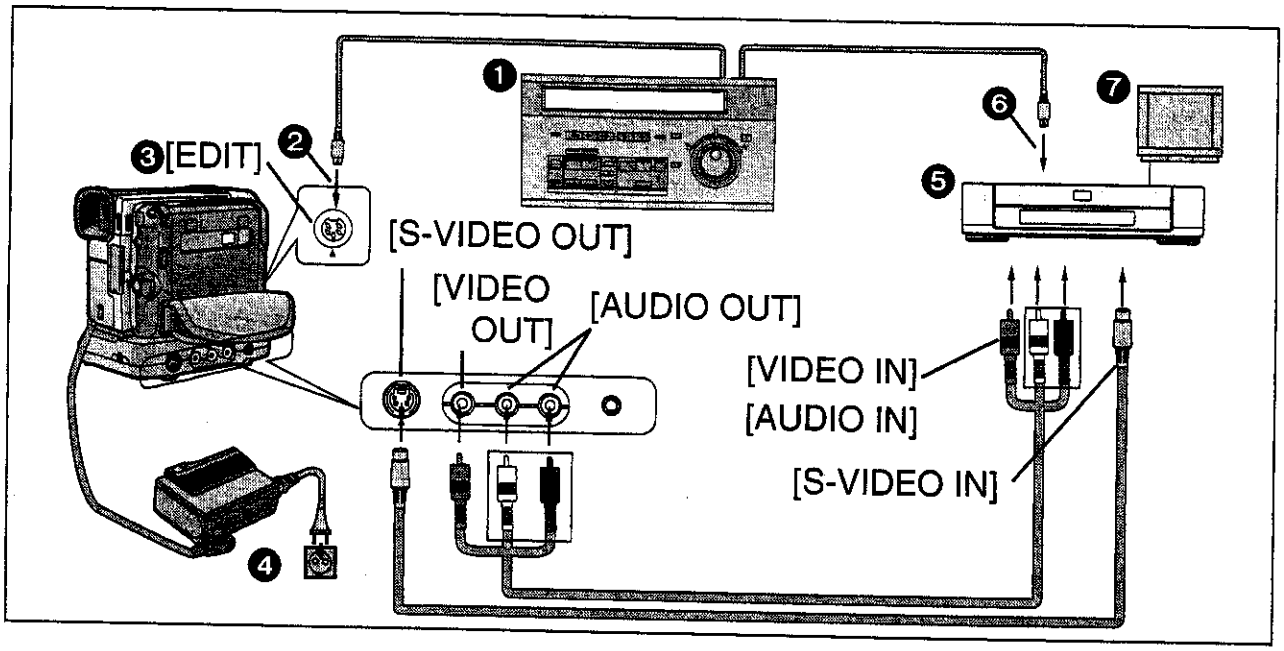
2 [錄影機]
裝入您將要進行拷貝的錄影帶，按[VCR/CAMERA]鈕，使[VCR]燈亮起。

3 [放影機]
按放影[▶]鈕，開始放影。

4 [錄影機]
一邊按[REC]（錄影）鈕，一邊按[PLAY]（放影）鈕（都在遙控器上）。
錄影即開始。

停止錄影時
按暫停[❚❚]或停止[■]鈕，可停止錄影。

- 不管錄影機[MENU (OTHERS)]菜單上的[AUDIO REC]（錄製）項的設定如何，將依放影機中錄影帶的相同音頻錄製狀態進行拷貝。
- 畫面下部可能會失真。但這並非功能故障，對實際錄製沒有任何影響。
- 如果未連接DV纜線，而開始拷貝時，將顯示錯誤信息，且可能會錄製一會兒的任意影像。
- 當放影機播放磁帶上未錄影的部分時，將錄製任意圖像。



ENGLISH

Copying with the Help of an Editing Controller

If you connect the Movie Camera to an Editing Controller equipped with 5-pin Edit Socket, this Movie Camera's playback functions can be controlled from the Editing Controller.
(The Output Terminal Box is necessary.)

When Connecting the Editing Controller VW-EC500E ❶ (optional)

- A VCR equipped with 5-pin Edit Socket is necessary.
- When you connect the VW-EC500E to the Movie Camera, an adjustment on the VW-EC500E is necessary. For the operation of the Editing Controller, refer to its operating instructions.

When Editing with Time Code

Press the [DISPLAY] Button on the Remote Controller to make the Time Code appear.

- When the Time Code is displayed, the Time Code Signal is output from the Edit Socket.
- When the Counter Indication is displayed, the Linear Tape Counter Signal is output.

❷ To Edit Socket
❸ Edit Socket
❹ Connect the AC Adaptor.
❺ VCR (optional)
❻ To Edit Socket
❼ TV (optional)

中文

借助編輯控制器進行複製

如果您將攝錄影機連接至具備 5 針編輯插孔的編輯控制器時，可用編輯控制器來進行該攝錄影機的放影功能控制。
(必須連接輸出端子箱。)

連接編輯控制器VW-EC500E ❶ (選購品) 時

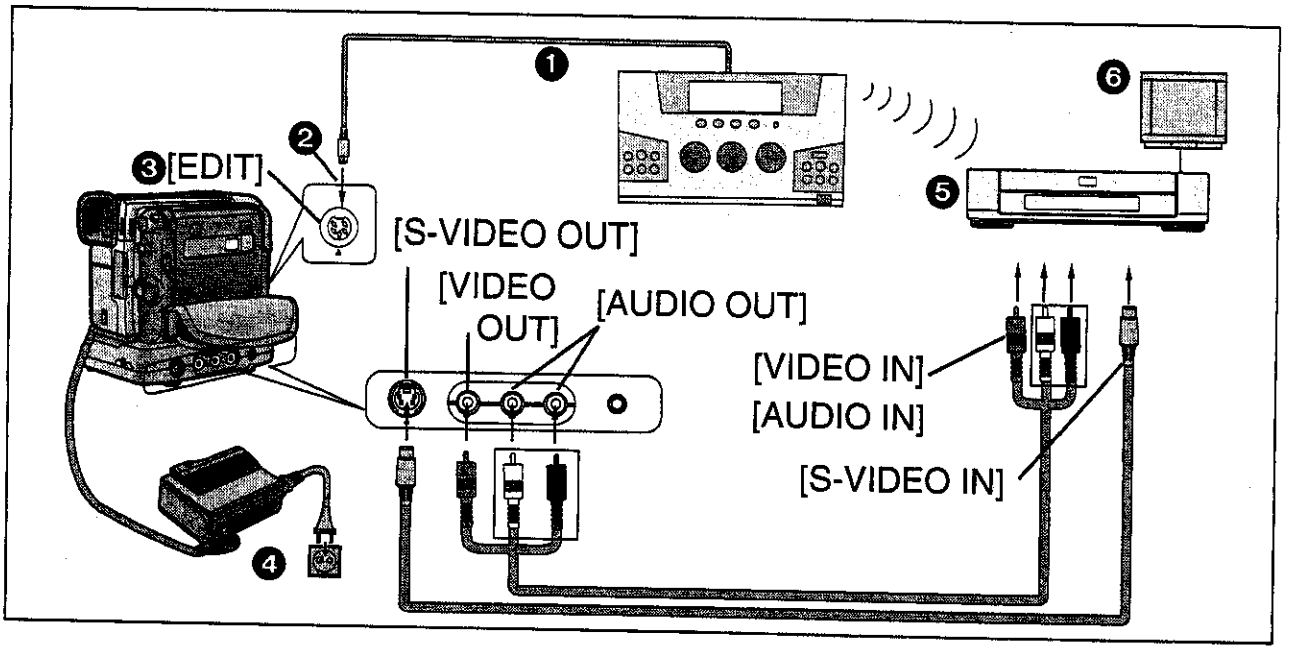
- 需要有具備5針編輯插孔的錄放影機。
- 當您將VW-EC500E連接至攝錄影機時，有必要對VW-EC500E進行調節。有關編輯控制器的操作，請參看其使用說明書。

用時間編碼進行編輯時

按遙控器上的[DISPLAY] (顯示) 鈕，使時間編碼出現。

- 當顯示出時間編碼時，將從編輯插孔輸出時間編碼信號。
- 當顯示出計數器指示時，將輸出線性磁帶計數器信號。

❷ 至編輯插孔
❸ 編輯插孔
❹ 連接交流轉接器
❺ 錄放影機 (選購品)
❻ 至編輯插孔
❼ 電視機 (選購品)



ENGLISH

When Connecting the Editing Controller VW-EC1E (optional)

- When you use the Editing Controller VW-EC1E ❶, it is not necessary to connect it to the Edit Socket on the VCR, as the VCR's operation is performed via remote controller. Therefore, editing is also possible onto VCRs not equipped with an Edit Socket.
- For the operation of the Edit Controller, refer to its operating instructions.

When Connecting the Editing Controller VW-EC310E to this Movie Camera, such events as described below may occur:

- The editing precision may be bad.
- Editing cannot be performed correctly.

Therefore, we recommend that you use the VW-EC500E or the VW-EC1E as Editing Controller with this Movie Camera.

❷ To Edit Socket
❸ Edit Socket
❹ Connect the AC Adaptor.
❺ VCR (optional)
❻ TV (optional)

中文

連接編輯控制器VW-EC1E(選購品)時

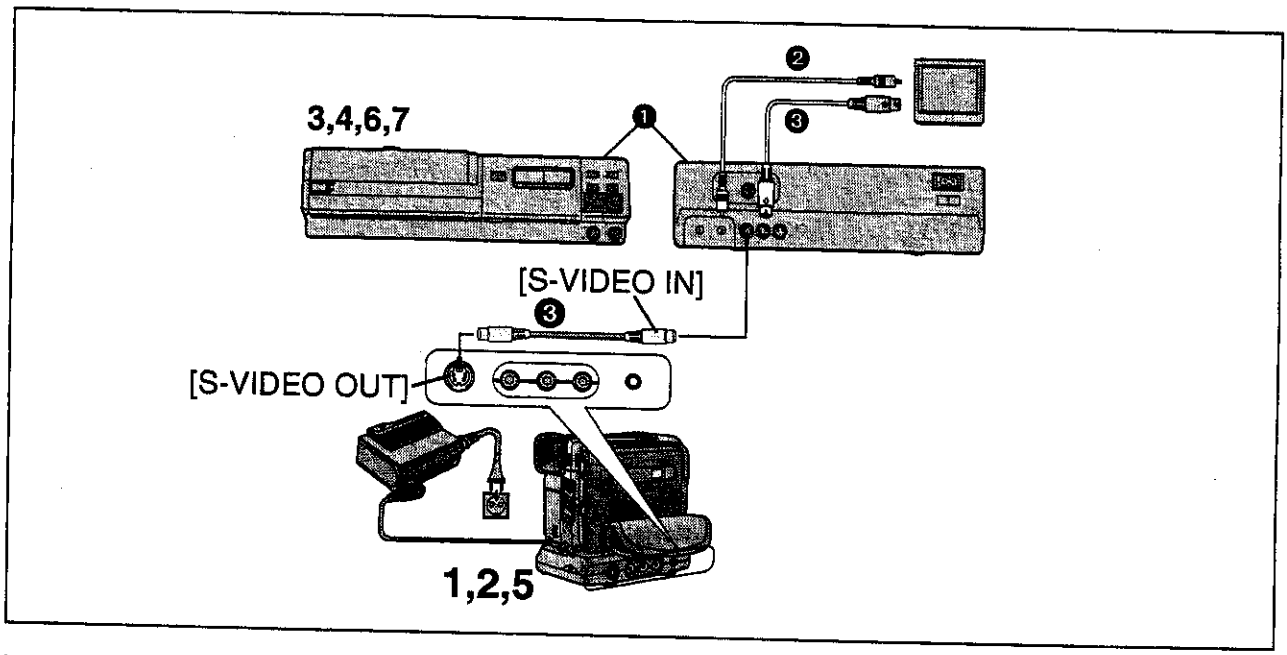
- 當您使用編輯控制器VW-EC1E ❶ 時，則不必將其連接至錄放影機的編輯插孔。由於錄放影機的操作是通過遙控器來進行的，所以也可在不具備編輯插孔的錄放影機上進行編輯。
- 有關編輯控制器的操作，請參看其使用說明書。

將編輯控制器VW-EC310E連接至該攝錄影機時，可能會發生下列事項：

- 編輯精度可能不好。
- 可能無法進行正確的編輯。

所以，建議您在該攝錄影機上使用VW-EC500E或VW-EC1E作為編輯控制器。

❷ 至編輯插孔
❸ 編輯插孔
❹ 連接交流轉接器
❺ 錄放影機 (選購品)
❻ 電視機 (選購品)



ENGLISH

Using the Movie Camera with a Video Printer

If you connect the Movie Camera to a Video Printer, you can print still pictures from scenes recorded with the Movie Camera.

Movie Camera:

1 Set the [POWER ON/OFF] Switch to [ON] to turn the Movie Camera on.

2 Insert a recorded cassette and press the [VCR/CAMERA] Button so that the [VCR] Lamp lights.

5 Press the Play Button [▶].

Video Printer:

3 Turn the Video Printer on.

4 If the Video Printer is equipped with Super Image Stabilizer Function and/or Moving/Still Picture Mode, adjust them according to the picture being input.

6 Store the image in memory.

7 Start printing.

- Read the operating instructions of the Video Printer ❶.

❷ Video Cable (supplied with the Video Printer)
❸ S-Video Cables (supplied with the Movie Camera and Video Printer)

中文

該攝錄影機與影像打印機的配合使用

如果您將攝錄影機連接至影像打印機時，便可用攝錄影機拍攝的場景來打印靜止圖像。

攝錄影機：

1 將[POWER ON/OFF]開關設置在[ON]，打開攝錄影機。

2 插入已拍錄影帶，按[VCR/CAMERA](錄放影機/攝錄影機)鈕，使[VCR]燈亮起。

5 按放影[▶]鈕。

影像打印機：

3 打開影像打印機。

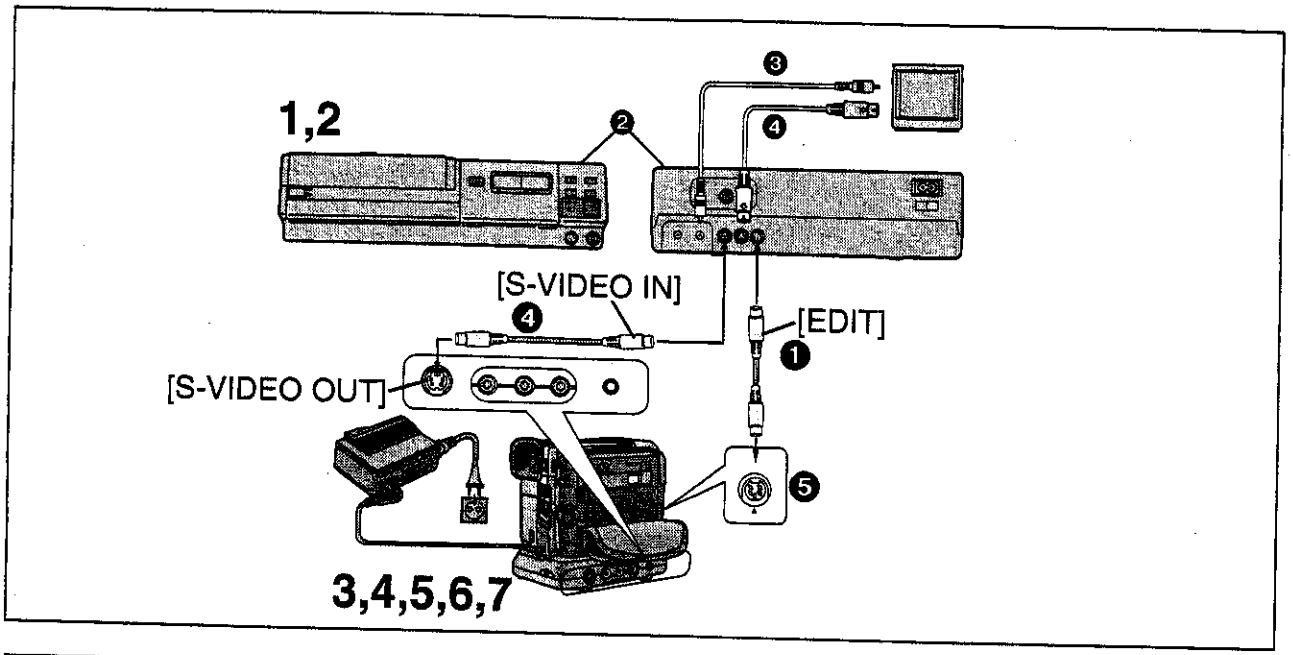
4 如果影像打印機裝備了超級畫面穩定功能和/或動畫/靜畫狀態時，請根據正在輸入的圖像來調節這些功能。

6 將圖像儲存在記憶中。

7 開始打印。

- 閱讀影像打印機的使用說明書❶。

❷ 影像纜線(影像打印機附帶)
❸ S影像纜線(攝錄影機和影像打印機附帶)



ENGLISH

Using the Automatic Printing Function (AUTOPRINT)

If you connect the Movie Camera to a Video Printer ❷ equipped with 5-pin Edit Socket, you can use the Auto Print Function to automatically print still pictures recorded in the Photoshot Function.

Video Printer:

1 Turn the Video Printer on.

2 Make the necessary settings on the Video Printer according to the input signal.

Movie Camera:

3 Set the [POWER ON/OFF] Switch to [ON] to turn the Movie Camera on.

4 Press the [VCR/CAMERA] Button so that the [VCR] Lamp lights.

5 Search for the first still picture from which you want to start printing with the Auto Print Function.

If you want to print all still pictures recorded on the cassette, rewind the tape to its beginning.

6 Press the [MENU] Button.

7 Set [AUTOPRINT] on the Menu to [ON].

Automatic printing starts.

- If you want to stop the automatic printing in the middle, press the Stop Button [■] on the Movie Camera.

❶ Edit Cable VW-K5E (optional)
❸ Video Cable (supplied with the Video Printer)
❹ S-Video Cables (supplied with the Movie Camera and Video Printer)
❺ Edit Socket

中文

使用自動打印功能 (AUTOPRINT)

如果您將攝錄影機連接至具備 5 針編輯插孔的影像打印機❷時，便可用自動打印功能，自動打印用拍照功能所拍攝的靜止圖像。

影像打印機:

1 打開影像打印機。

2 根據輸入信號進行影像打印機的必要設定。

攝錄影機:

3 將[POWER ON/OFF]開關設置在[ON]，打開攝錄影機。

4 按[VCR/CAMERA](錄放影機/攝錄影機)鈕，使[VCR]燈亮起。

5 尋影您打算用自動打印功能進行打印的第一幀靜止圖像。

如果您想要打印錄影帶上拍攝的所有圖像時，請將錄影帶倒轉到開頭。

6 按[MENU](菜單)鈕。

7 將菜單上的[AUTOPRINT](自動打印)設置在[ON]。

自動打印即開始。

- 如果您想中途停止自動打印時，請按攝錄影機上的淡化/停止[■]鈕。

❶ 編輯纜線VW-K5E (選購品)
❸ 影像纜線 (影像打印機附帶)
❹ S影像纜線 (攝錄影機和影像打印機附帶)
❺ 編輯插孔

ENGLISH

- When the cooling function of the Video Printer is activated and the printing speed slows down, the automatic printing may stop. In this case, set [AUTOPRINT] to [ON] again.

- If you replace the ink cassette or paper during printing, the same picture may be printed twice.

- If still pictures are recorded successively in the Photoshot Mode, some pictures may be skipped during printing.

- Before storing an image in memory on the Video Printer, press the [OSD] Button (➜ 52) on the Remote Controller of the Movie Camera so that no indications appear in the picture. Otherwise, the Counter Indication and other function indications are also printed in the picture.

- In the following cases, some pictures may be skipped when printing by using the Auto Print Function.
  - When you print still pictures recorded in the Photoshot Mode on the video camera of another brand.
  - If you turn the Movie Camera on and several times (3 times or more) between recording two still pictures in the Photoshot Mode.
  - When you record a still picture in the Photoshot Mode on the same part of a cassette where a photoshot picture was recorded before.
  - When you selected a different recording speed (SP/LP) between the recording two still picture in the Photoshot Mode.
  - At the first photoshot picture to be printed.

中文

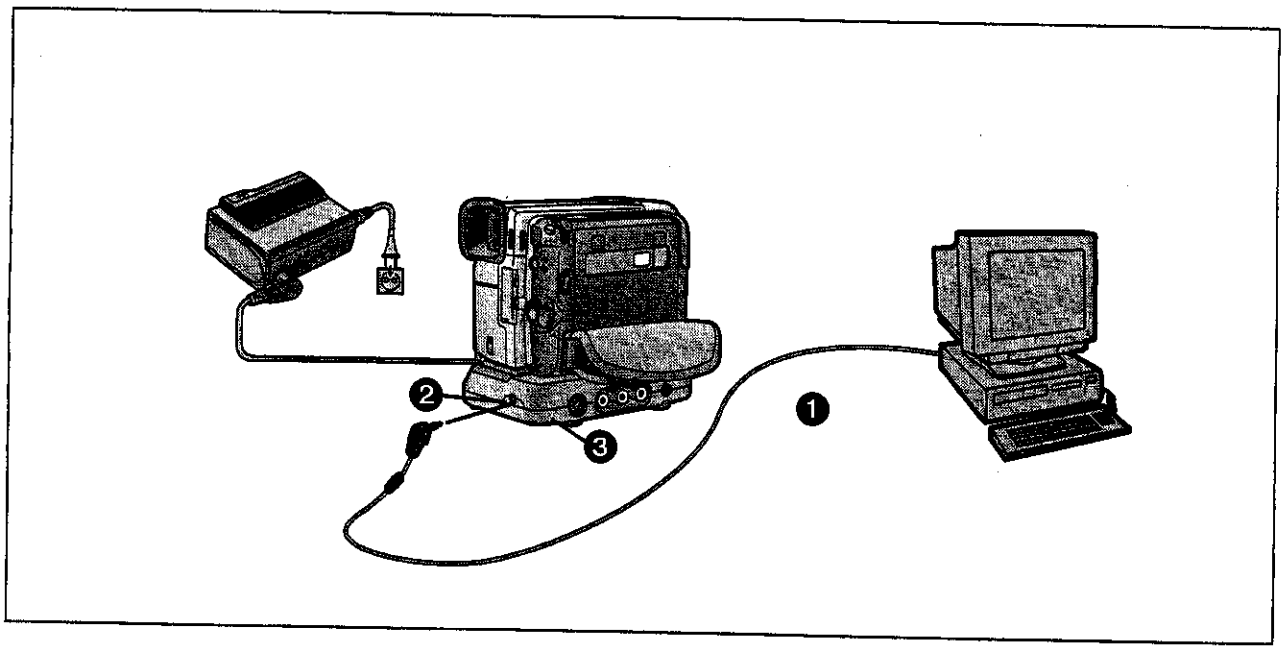
- 當影像打印機的冷卻功能啟動，且打印速度減慢時，自動打印可能會停止。此種情況下，請將[AUTOPRINT]再次設置在[ON]。

- 如果您在打印中更換了打印帶或紙張時，同樣圖像可能會打印兩張。

- 若在拍照狀態下連續拍攝了靜止圖像時，打印中可能會跳越某些圖像。

- 將圖像儲存在影像打印機之前，請按攝錄影機的遙控器上的[OSD] (屏幕顯示) 鈕 (➜ 52)，使圖像不出現指示。否則，計數器指示和其它功能指示也會打印在圖像中。

- 下列情況下，在用自動打印功能進行打印中，某些圖像可能會被跳越而過。
  - 當您打印用其它牌號的攝錄影機、並在拍照狀態下拍攝的靜止圖像時。
  - 如果您在拍照狀態下，於拍攝兩幀靜止圖像之間幾次 (3次以上) 打開攝錄影機時。
  - 當您在錄影帶上以前錄有拍照圖像的相同位置，以拍照狀態來拍攝靜止圖像時。
  - 當您在拍攝狀態下，於拍攝兩幀靜止圖像之間選擇了不同拍攝速度 (SP/LP) 時。
  - 第一幀靜止圖像



ENGLISH

Using the Movie Camera with a Computer

The Personal Computer Connection Kit VW-DTA1E (optional) for Digital Video Cameras makes it possible to connect the Movie Camera to a computer and transmit still video images to it. (The Output Terminal Box is also necessary.)

Computer System Requirements

DV STUDIO can be installed in a PC/AT personal computer which can run Microsoft® Windows® 95.

Compatible machines:	Personal computer with 80486DX4 or higher CPU (Pentium™ or higher recommended)
Graphic card:	True Color (approx. 16.7 million colours) recommended (operarion also possible even with 256 colours)
Installed memory:	16 MB or more (32MB or more recommended)
Free hard disk space:	At least 10MB
Disk drive:	CD-ROM drive
Serial port:	RS-232C (D-sub 9pin)
Other requirements:	Mouse

To connect the Movie Camera to the computer, use the special Interface Adaptor ❶ contained in the Personal Computer Connection Kit.

- Pictures that you intend to import into computer application should be recorded in the SP Mode.
- When recording, take care that the Time Code is uninterrupted from the beginning of the tape.
- Windows® 95 is a trademark of Microsoft Corporation U.S.A.
- All other company and product names in the operating instructions are trademarks of their respective corporations.

❷ Digital Still Picture Terminal
❸ Output Terminal Box

中文

攝錄影機與微電腦的配合使用

用於數位影像攝錄影機的個人微電腦連接套件VW-DTA1E（選購品），使攝錄影機與個人微電腦的連接和將靜止圖像傳送給微電腦成為可能（也需要連接輸出端子箱）。

微電腦系統要求

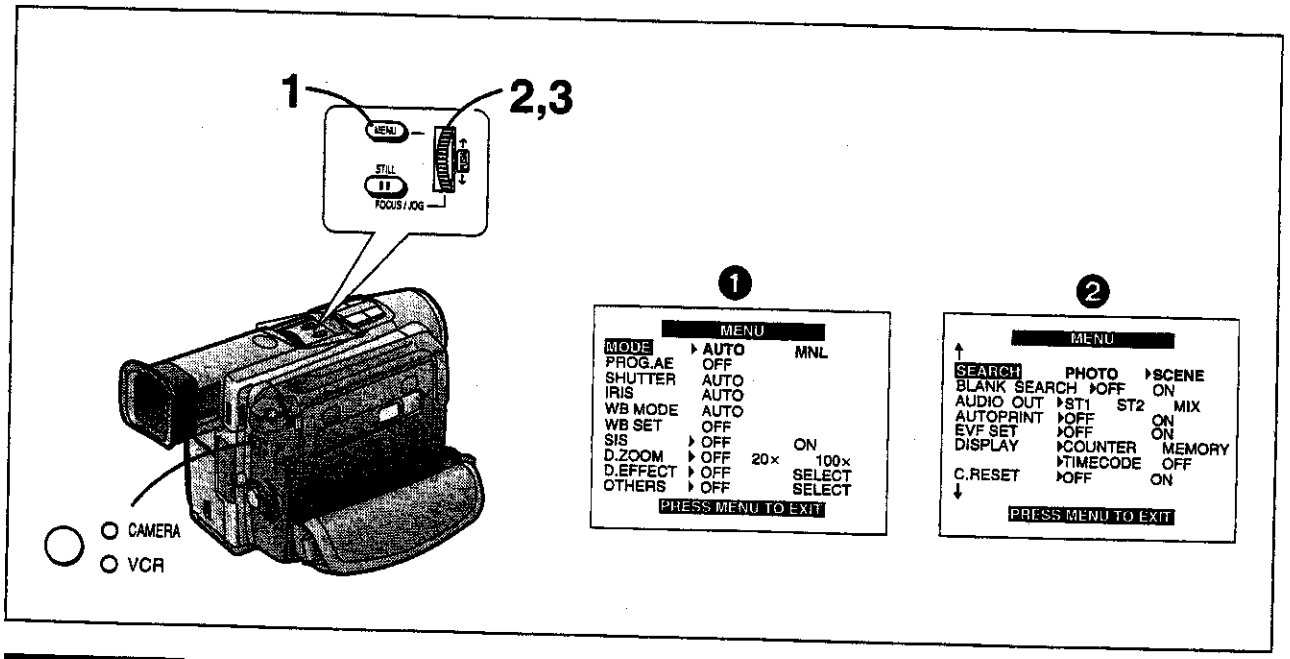
DV STUDIO（數位影像演播室）可被裝入能夠運行微軟® 窗口®95的PC/AT個人微電腦中。

對應機器:	具備80486D × 4或更好處理器的個人微電腦（推薦Pentium™或更好）
圖形卡:	建議採用真色（約16.7百萬色）（即使用256色也可進行操作）
安裝內存:	16MB或以上（推薦32MB或以上）
空餘硬盤容量:	至少10MB
磁盤驅動器:	CD-ROM驅動器
串行端口:	RS-232C（D-sub 9針）
其它要求:	鼠標器

將攝錄影機連接至微電腦時，請使用個人微電腦連接套件所附帶的特殊接口轉接器❶。

- 您打算裝入微電腦應用程序上的圖像，應該用SP狀態拍攝。
- 拍攝時，要注意時間編碼從錄影帶開始起，一直不被中斷。
- 窗口95是美國微軟有限公司的商標。
- 使用說明書中的所有其它公司和產品名稱都是其相應公司的商標。

❷ 數位靜畫端子
❸ 輸出端子箱



ENGLISH

Using the Menu Screen

This Movie Camera displays the settings of various functions in Menus to make it easy to select the desired functions and settings.

1 Press the [MENU] Button.
The Menu appears.

2 Turn the [PUSH] Dial to select the item to set.
Turning the [PUSH] Dial changes the highlighted item.

3 Press the [PUSH] Dial to set the selected item to the desired mode.
Every press moves the cursor [▶] to the next mode.

Displaying the Camera Mode Menu ❶
Press the [MENU] Button in the Recording Pause Mode.
- While the Menu is displayed, recording is not possible.
- During recording, displaying the Menu is not possible.

Displaying the VCR Mode Menu ❷
Press the [MENU] Button when the [VCR] Lamp is lit.
- While the Menu is displayed, playback is not possible.
- During playback, displaying the Menu is possible.

Exiting the Menu
Press the [MENU] Button again.

Note About the Settings Made on the Menu
The settings you selected on the Menu are maintained when you turn the Movie Camera off. However, if you disconnect the power supply unit (Battery or AC Adaptor) from the Movie Camera before turning it off, the selected settings may not be maintained.

中文

使用菜單屏幕

該攝錄影機可在菜單上顯示各種功能的設定情況，以便能簡單地選擇需要的功能和設定值。

1 按[MENU](菜單)鈕。
即出現菜單。

2 轉動[PUSH](下按)環，選擇要設定的項目。
轉動[PUSH]環，可改變高光項目。

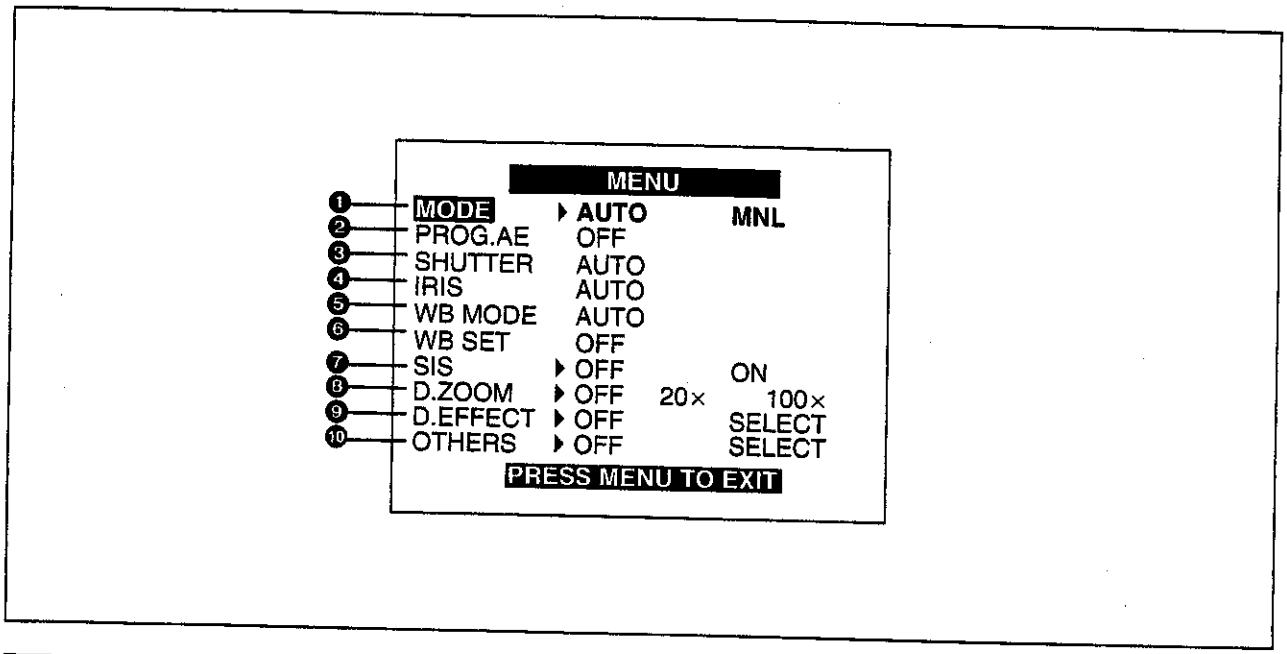
3 按[PUSH]環，將選擇的項目設定為需要的狀態。
每次按該環，都會使光標[▶]移到下一個狀態。

顯示攝錄影機狀態菜單 ❶ 時
在拍攝暫停狀態下，按[MENU]鈕。
- 在菜單顯示中，將無法進行拍攝。
- 拍攝中，將無法顯示菜單。

顯示錄放影機狀態菜單 ❷ 時
當[VCR](錄放影機)亮起時，按[MENU]鈕。
- 在菜單顯示中，將無法進行放影。
- 拍攝中，將無法顯示菜單。

退出菜單時
再次按[MENU]鈕。

菜單上的設定操作須知
當您關閉攝錄影機時，您在菜單上選擇的設定將得到保存。然而，在電源關閉之前，若從攝錄影機拔掉供電裝置(電池或交流轉接器)時，選擇的設定將無法得到保存。


MENU
❶ MODE ▸ AUTO MNL
❷ PROG.AE OFF
❸ SHUTTER AUTO
❹ IRIS AUTO
❺ WB MODE AUTO
❻ WB SET OFF
❼ SIS ▸ OFF ON
❽ D.ZOOM ▸ OFF 20× 100×
❾ D.EFFECT ▸ OFF SELECT
❿ OTHERS ▸ OFF SELECT
PRESS MENU TO EXIT

ENGLISH

Menu Functions

Camera Mode Menu

❶ **Recording Mode [MODE] (➔ 30)**

❷ **Auto Exposure Modes [PROG.AE] (➔ 68)**

❸ **Shutter Speed [SHUTTER] (➔ 84)**

❹ **Iris [IRIS] (➔ 86)**

❺ **White Balance Mode Selection [WB MODE] (➔ 80)**

❻ **Manual White Balance Adjustment Mode [WB SET] (➔ 82)**

❼ **Super Image Stabilizer [SIS] (➔ 42)**

❽ **Digital Zoom [D.ZOOM] (➔ 36)**

❾ **Digital Effects [D.EFFECT] (➔ 74, 76, 78)**

❿ **Other Items [OTHERS] (➔ 122)**
If you set [OTHERS] to [SELECT], the [MENU (OTHERS)] Menu appears.

中文

菜單功能

攝錄影機狀態菜單

❶ 拍攝狀態[MODE](➔ 30)

❷ 自動曝光狀態[PROG.AE](➔ 68)

❸ 快門速度[SHUTTER](➔ 84)

❹ 光圈[IRIS](➔ 86)

❺ 白色平衡狀態選擇[WB MODE](➔ 80)

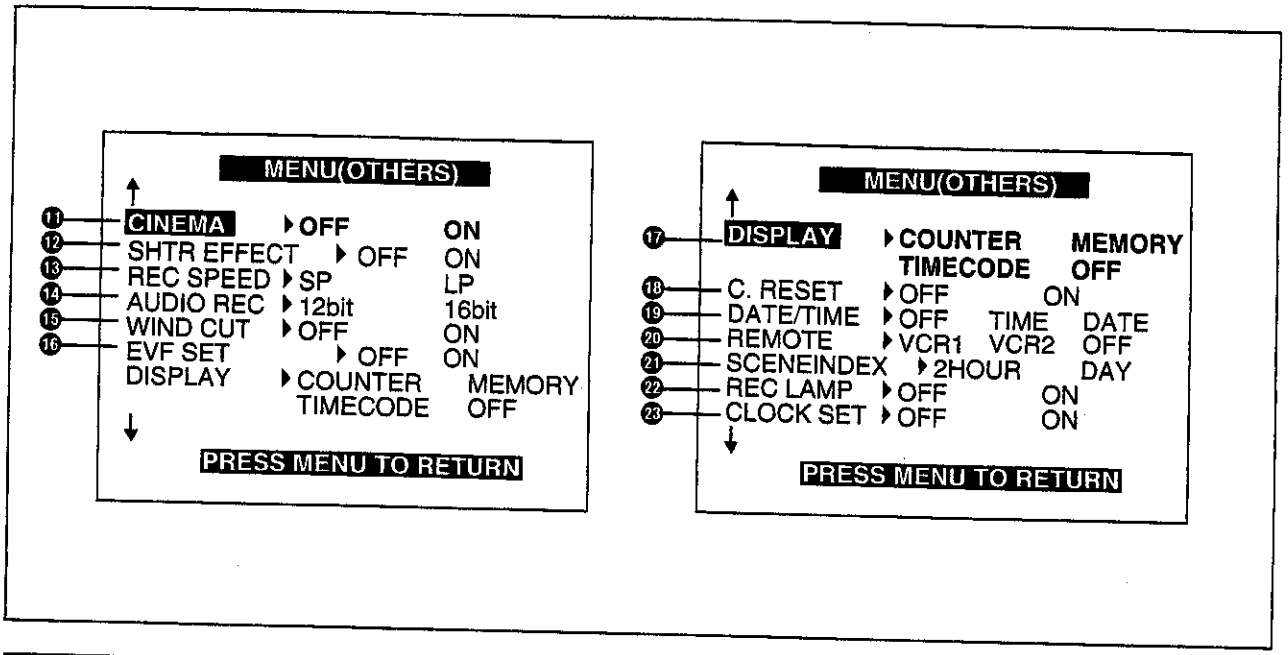
❻ 手動白色平衡調節狀態[WB SET](➔ 82)

❼ 超級畫面穩定[SIS](➔ 42)

❽ 數位變焦[D.ZOOM](➔ 36)

❾ 數位效果[D.EFFECT](➔ 74、76、78)

❿ 其它項目[OTHERS](➔ 122)
如果將[OTHERS]設置為[SELECT]時，會出現[MENU (OTHERS)]菜單。


MENU(OTHERS)
⓫ CINEMA ▸OFF ON
⓬ SHTR EFFECT ▸OFF ON
⓭ REC SPEED ▸SP LP
⓮ AUDIO REC ▸12bit 16bit
⓯ WIND CUT ▸OFF ON
⓰ EVF SET ▸OFF ON
DISPLAY ▸COUNTER MEMORY
TIMECODE OFF
PRESS MENU TO RETURN
MENU(OTHERS)
⓱ DISPLAY ▸COUNTER MEMORY
TIMECODE OFF
⓲ C. RESET ▸OFF ON
⓳ DATE/TIME ▸OFF TIME DATE
⓴ REMOTE ▸VCR1 VCR2 OFF
㉑ SCENEINDEX ▸2HOUR DAY
㉒ REC LAMP ▸OFF ON
㉓ CLOCK SET ▸OFF ON
PRESS MENU TO RETURN

ENGLISH

⓫ **Cinema-like Format Recording [CINEMA] (➔ 40)**

⓬ **Shutter Effect [SHTR EFFECT] (➔ 38)**

⓭ **Recording Speed Mode [REC SPEED] (➔ 24)**

⓮ **Audio Recording Mode [AUDIO REC] (➔ 88)**

⓯ **Wind Buffer [WIND CUT]**
If you set [WIND CUT] to [ON], the noise of the wind hitting the Microphone is reduced. However, this also causes a slight deterioration of the sound reproduction in the bass range.

⓰ **Finder Adjustment [EVF SET] (➔ 130)**

⓱ **Counter Display Mode [DISPLAY] (➔ 162)**

⓲ **Counter Reset [C.RESET] (➔ 154)**
To reset the counter to zero.
However, the Time Code cannot be reset.

⓳ **Date and Time Indication [DATE/TIME] (➔ 44)**

⓴ **Remote Controller Mode [REMOTE] (➔ 100)**

㉑ **Scene Index Mode [SCENEINDEX] (➔ 60)**

㉒ **Recording Lamp [REC LAMP] (➔ 30)**

㉓ **Date and Time Setting [CLOCK SET] (➔ 126)**

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⓫ **電影般格式拍攝**[CINEMA] (➔ 40)

⓬ **快門效果**[SHTR EFFECT] (➔ 38)

⓭ **錄影速度狀態**[REC SPEED] (➔ 24)

⓮ **音頻錄製狀態**[AUDIO REC] (➔ 88)

⓯ **風聲緩和器**[WIND CUT]
如果您將[WIND CUT]設置在[ON]時，風吹麥克風的噪音將得到減少。然而，對低音範圍的再生也會有輕微的不利影響。

⓰ **電子尋像器調節**[EVF SET] (➔ 130)

⓱ **計數器顯示狀態**[DISPLAY] (➔ 162)

⓲ **計數器復原**[C.RESET] (➔ 154)
可使計數器復原至零。
然而，時間編碼不能被復原。

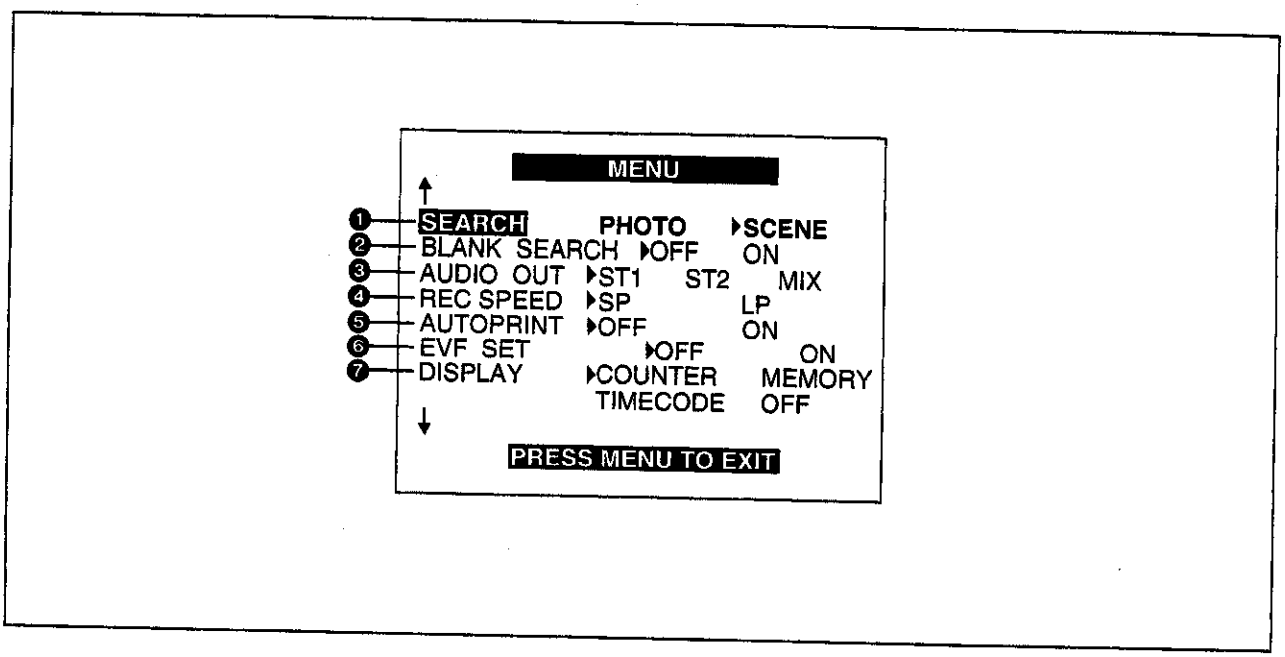
⓳ **日期和時間指示**[DATE/TIME] (➔ 44)

⓴ **遥控器狀態**[REMOTE] (➔ 100)

㉑ **場景索引狀態**[SCENEINDEX] (➔ 60)

㉒ **錄影燈**[REC LAMP] (➔ 30)

㉓ **日期和時間設定**[CLOCK SET] (➔ 126)



ENGLISH

VCR Mode Menu

❶ **Index Search [SEARCH] (→ 62, 64)**

❷ **Blank Search [BLANK SEARCH](→ 58)**

❸ **Audio Output Mode [AUDIO OUT] (→ 90)**

❹ **Recording Speed [REC SPEED] (→ 24)**

❺ **Automatic Printing [AUTOPRINT] (→ 112)**

❻ **Finder Adjustment [EVF SET] (→ 130)**

❼ **Counter Display Mode [DISPLAY] (→ 162)**

- **All other items on the VCR Mode Menu not shown above are the same as on the Camera Mode Menu. (→ 122)**

中文

錄放影機狀態菜單

❶ 索引尋影[SEARCH] (→ 62, 64)

❷ 空白尋影[BLANK SEARCH] (→ 58)

❸ 音頻輸出狀態[AUDIO OUT] (→ 90)

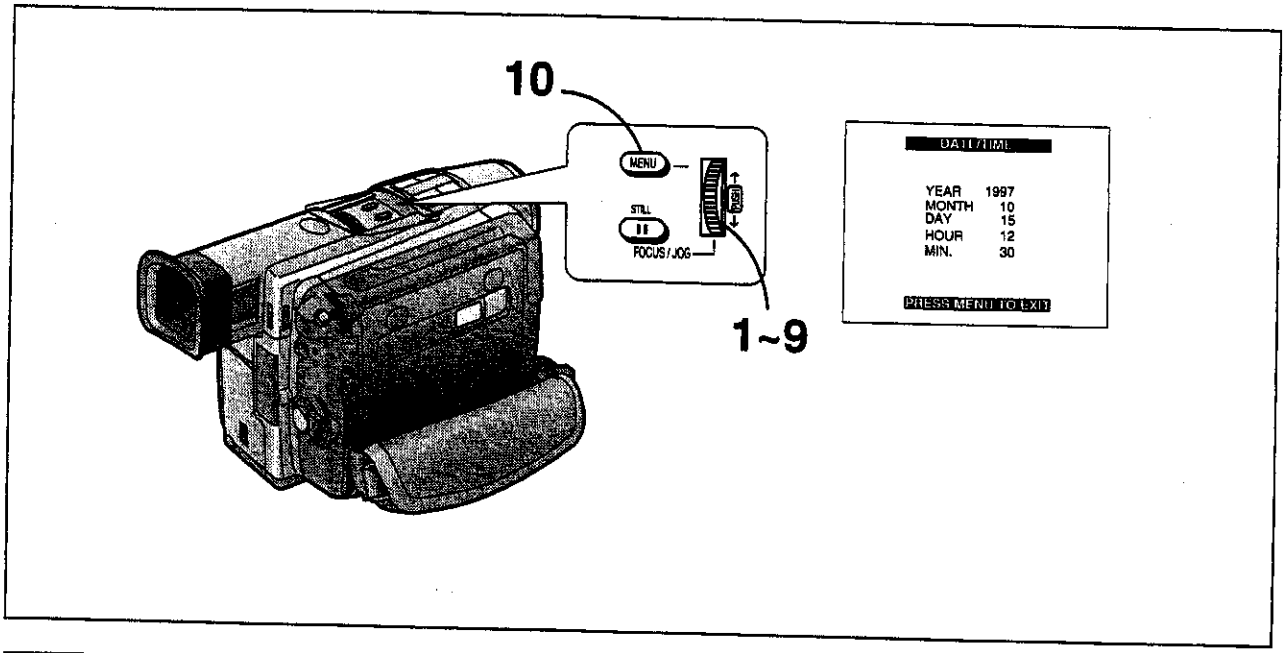
❹ 錄影速度[REC SPEED] (→ 24)

❺ 自動打印[AUTOPRINT] (→ 112)

❻ 電子尋像器調節 [EVF SET] (→ 130)

❼ 計數器顯示狀態[DISPLAY] (→ 162)

- 未表示在上面的錄放影機狀態菜單的所有其它項目，與攝錄影機狀態菜單的相同。(→ 122)



ENGLISH

Setting the Date and Time

Selecting [OTHERS] on the Menu (either Camera or VCR Mode Menu) and setting [CLOCK SET] to [ON] displays the menu shown above.(➔ 122)

For example: To set the clock to 15th October 1997, 12:30.

1 **Turn the [PUSH] Dial to set to [1997].**

2 **Press the [PUSH] Dial to select [MONTH].**

3 **Turn the [PUSH] Dial to set to [10].**

4 **Press the [PUSH] Dial to select [DAY].**

5 **Turn the [PUSH] Dial to set to [15].**

6 **Press the [PUSH] Dial to select [HOUR].**

7 **Turn the [PUSH] Dial to set to [12].**

8 **Press the [PUSH] Dial to select [MIN.].**

9 **Turn the [PUSH] Dial to set to [30].**

10 **Press the [MENU] Button to finish the date and time setting.**
The operation of the clock starts from [00] seconds.

中文

設定日期和時間

選擇菜單(攝錄影機或錄放影機狀態菜單)上的[OTHERS]，並將[CLOCK SET]設定為[ON]時，可顯示上面的菜單。(➔ 122)

例如：將時鐘設定為1997年10月15日12:30時。

1 **轉動[PUSH]環，設定至[1997]。**

2 **按[PUSH]環，選擇[MONTH](月)。**

3 **轉動[PUSH]環，設定至[10]。**

4 **按[PUSH]環，選擇[DAY](日)。**

5 **轉動[PUSH]環，設定至[15]。**

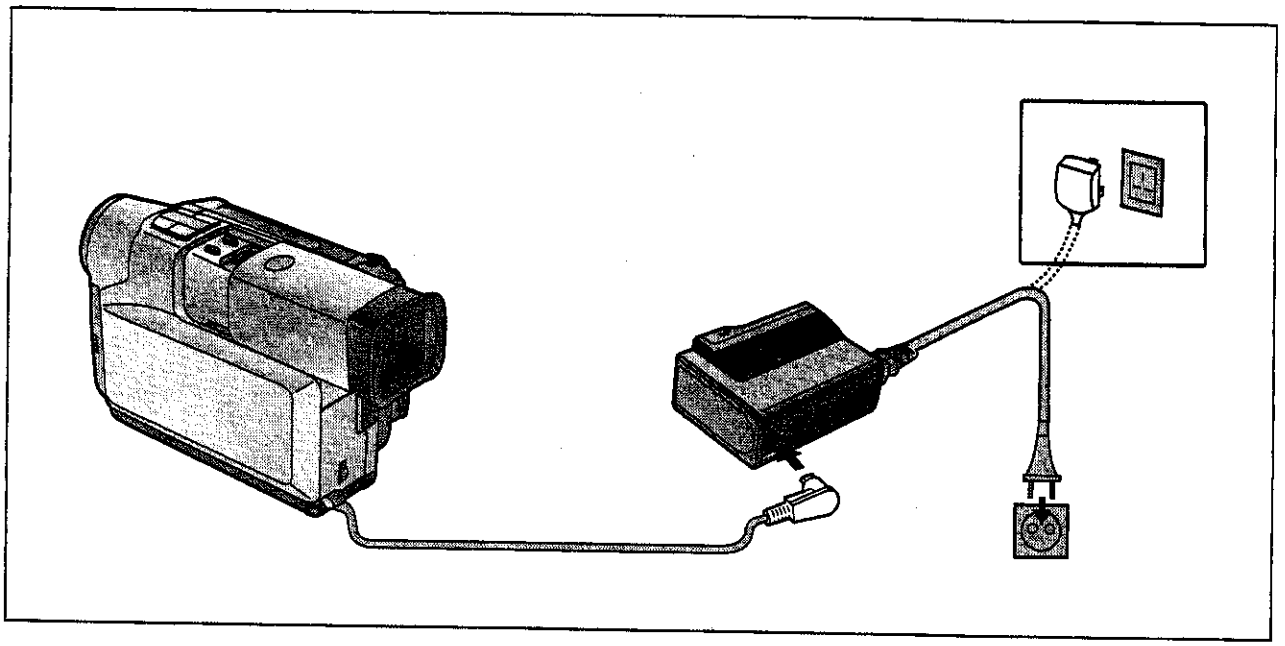
6 **按[PUSH]環，選擇[HOUR](小時)。**

7 **轉動[PUSH]環，設定至[12]。**

8 **按[PUSH]環，選擇[MIN.](分鐘)。**

9 **轉動[PUSH]環，設定至[30]。**

10 **按[MENU](菜單)鈕，結束日期和時間設定。**
時鐘將從[00]秒開始操作。



ENGLISH

- As small imprecisions in the time indication can occur, we recommend that you confirm that the time shown is correct before you start recording. When the [ ] Indication appears, charge the built-in battery and set the date and time.
- The years change in the following order:
  1990 → 1991 → ... → 2089 → 1990 →..

Charging the Built-in Battery

The built-in battery maintains the operation of the clock. When the [ ] Indication appears, the built-in battery is discharged. Charge the discharged battery in the following way and after charging is finished, set the date and time.

1 Connect the AC Adaptor to the Movie Camera and to an AC mains socket. (→ 16)

2 Leave the Movie Camera turned off.

3 Leave the Movie Camera in this condition for approximately 4 hours.
After charging for 4 hours, the built-in lithium battery can power the clock for approximately 3 months.

中文

- 由於時間指示將有些微誤差，所以建議您在開始拍攝前，確認時間表示。當出現[ ]指示時，請給內藏電池充電，並設定日期和時間。
- 年數將以下順序改變：
  1990→1991→...→2089→1990→...

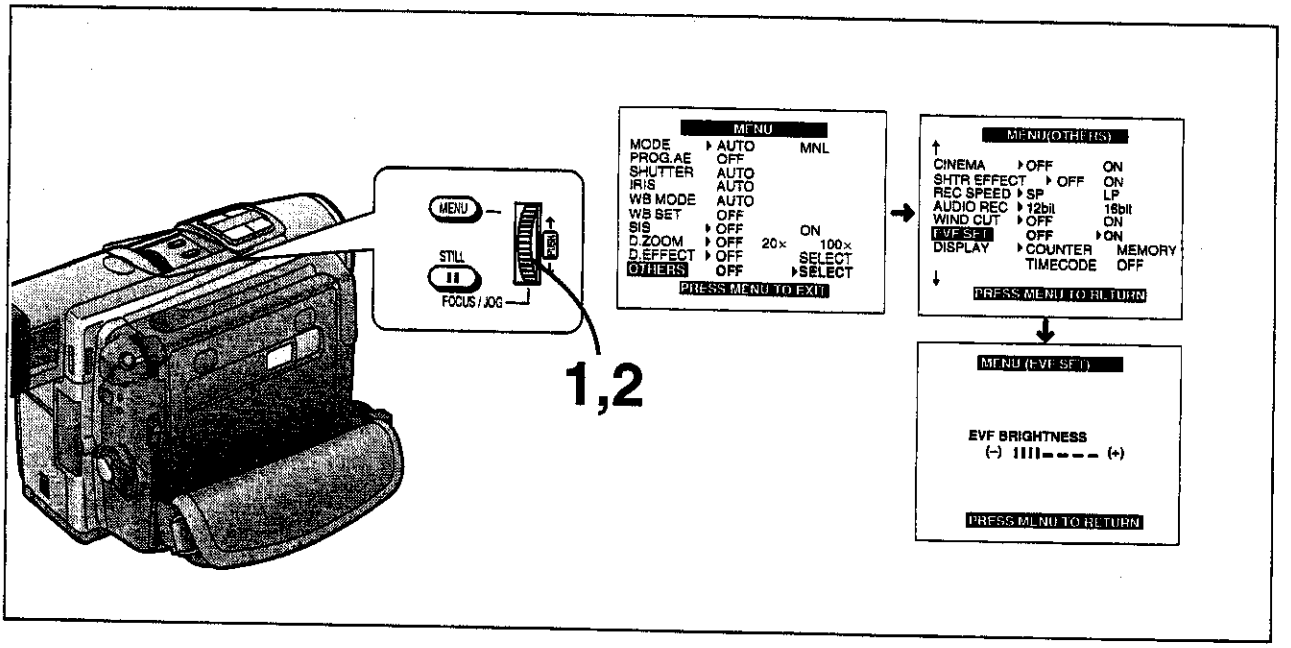
給內藏電池充電

內藏電池是用於維持時鐘運轉的。當出現[ ]指示時，說明內藏電池已經耗盡。請用下列方法給耗盡的電池充電，並在充電之後，進行日期和時間設定。

1 將交流轉接器連接至攝錄影機，和交流主插座。(→ 16)

2 關閉攝錄影機的電源。

3 使攝錄影機處於該狀態約 4 小時。
內藏鋰電池充電4小時後，可為時鐘供電約3個月。



ENGLISH

Adjusting the Finder

Selecting [OTHERS] on the Menu (either Camera or VCR Mode Menu) and setting [EVF SET] to [ON] displays the following items. (➔ 118-122)

Finder Brightness [EVF BRIGHTNESS]
To adjust the brightness of the Finder. The Bar Indication is divided into 8 steps. The more vertical bars are shown, the brighter is the screen.

1 Turn the [PUSH] Dial. Turning it increases or decreases the vertical bars of the Bar Indication.

中文

調節電子尋像器

選擇菜單 (攝錄影機或錄放影機狀態菜單) 上的[OTHERS]，並將[EVF SET]設定為[ON]時，可顯示下列項目。
(➔ 118~122)

電子尋像器亮度[EVF BRIGHTNESS]
可調節電子尋像器的亮度。條棒指示分為8段。表示的垂直條棒指示越多，屏幕將越亮。

1 轉動[PUSH]環。旋轉該環，可增加或減少條棒指示的垂直條棒。

ENGLISH

Cautions for Use

Take care that no water enters the Movie Camera when using it in the rain and snow or on the beach.

- The Movie Camera and the cassette could become damaged. (It may not be repairable.)

Keep the Movie Camera away from magnetized equipment (TVs, TV games, etc.).

- If you use the Movie Camera on or near a TV, the electromagnetic radiation may cause picture and sound distortion.
- Strong magnetic fields generated by speakers and large motors may damage the recordings on tape and distort the picture.
- The electromagnetic radiation from micro-computers can adversely influence the Movie Camera and cause picture and sound distortion.
- If the Movie Camera is adversely influenced by magnetized equipment and does not work correctly turn the Movie Camera off, remove the Battery or disconnect the AC Adaptor and insert the Battery or connect the AC Adaptor again. Then turn the Movie Camera on.

Do not use the Movie Camera near a radio transmitter or high-voltage power line.

- If you record near a radio transmitter or high-voltage power line, the recorded picture and sound may be adversely influenced.

Do not use the Movie Camera for surveillance and other industrial applications.

- If the Movie Camera is being used for a long time, the inside temperature rises and this may cause malfunction.
- This Movie Camera is not designed for industrial use.

Take care that no sand and fine dust enters the Movie Camera when using it on a beach or similar places.

- The sand and dust could damage the Movie Camera and cassette. (Be careful when inserting and removing the cassette.)

中文

使用注意事項

在雨雪之中或海邊上使用時，小心勿讓攝錄影機中進水。

- 攝錄影機和錄影帶可能會受損 (可能無法得到維修)。

使攝錄影機避開磁性設備(電視機、電視遊戲機等)。

- 如果您在電視機附近使用攝錄影機時，電磁輻射可能會引起圖像和聲音失真。
- 揚聲器和大型馬達所產生的強磁場，可能會損壞錄影帶的拍攝內容和歪曲圖像。
- 來自微電腦的電磁輻射會對攝錄影機造成不利影響，而引起圖像和聲音失真。
- 如果攝錄影機受到磁性設備的不利影響，且無法正常工作時，請關閉攝錄影機取出電池或拔出交流轉接器，然後再插入電池或連接交流轉接器。然後打開攝錄影機。

勿靠近收音機發射台或高壓電線使用攝錄影機

- 如果您靠近收音機發射台或高壓電線進行拍攝時，拍攝的圖像和聲音可能會受到不利影響。

勿將攝錄影機用作監視和其它工業目的

- 如果攝錄影機使用時間太長時，內部溫度會昇高，並可能導致功能失常。
- 該攝錄影機並非設計用於工業目的。

在海邊或類似之處進行使用時，小心勿讓砂子或微小塵埃進入攝錄影機之內。

- 砂子和塵埃可能會損壞攝錄影機和錄影帶 (插入和取出錄影帶時須多加小心)。

ENGLISH

Take care not to drop the Movie Camera when carrying it.

- Strong shocks could damage the body of the Movie Camera and cause malfunction.
- When carrying, hold the Movie Camera by the Grip Belt or Shoulder Strap and handle it with care.

Do not spray an insecticide or volatile agents on the Movie Camera.

- Such agents could deform the body and cause the surface coating to peel off.
- Do not bring the Movie Camera in direct contact with rubber or plastic products for a long time.

Do not use benzine or thinner for cleaning.

- Before cleaning, remove the Battery or unplug the AC Mains Cable from the AC mains socket.
- They could deform the body and cause the surface coating to peel off.
- Wipe the Movie Camera with a soft, clean cloth. To remove persistent stains, wipe with a cloth moistened with mild detergent diluted with water and finish with a dry cloth.

After use, always take out the cassette and remove the Battery or unplug the AC Mains Cable from the AC mains socket.

- If you leave the cassette in the Movie Camera, the tape can become loosened and damaged.
- If you leave the battery in the Movie Camera for a long time, the voltage level may drop very low so that the Battery cannot be used any more even after charging.

中文

攜帶時小心勿摔落攝錄影機

- 強烈的振動可能會損壞攝錄影機的機殼，和造成功能失常。
- 攜帶時，應該用扣抓皮帶或肩用背帶套住攝錄影機，且要小心拿放。

勿在攝錄影機上噴灑殺蟲劑或揮發劑。

- 這些物質可能會使機殼變形和引起表面塗層剝落。
- 勿使攝錄影機長時間直接與橡膠或塑料製品相接觸。

勿使用揮發劑或稀釋劑進行清潔。

- 清潔之前，請取出電池或從交流主插座上拔掉交流主電線。
- 這些物質可能會使機殼變形和引起表面塗層剝落。
- 請乾淨的軟布擦拭攝錄影機。清除頑固的髒跡時，請用布浸上用水稀釋的中性洗潔劑，最後再用乾布收尾。

使用後，最好取出錄影帶和電池，或從交流主插座上拔掉交流主電線。

- 如果讓錄影帶留在攝錄影機之內時，錄影帶可能會變鬆弛而受損。
- 若將電池長期留在攝錄影機之內時，可能導致電壓電平降得過低，以至於充電之後，使其再也無法得到使用了。

ENGLISH

■ Condensation

Determining Whether the Condensation Has Formed Inside and Remedy for Condensation

If the Condensation indication flashes after you turn on the Movie Camera, condensation has formed inside the Movie Camera. In this case, the Movie Camera automatically switches off after a few seconds. Remedy as follows:

1 Take out the cassette.
All other functions do not work. Depending on the amount of condensation, it may not be possible to take out the cassette. In this case, wait 2 - 3 hours before taking out the cassette.

2 Leave the Cassette Compartment open and wait for 2-3 hours.
The required time depends on the amount of condensation and the ambient temperature.

3 After 2-3 hours, turn the Movie Camera on and check if the Condensation Indication is not displayed.
Even if the Condensation Indication is no longer displayed, wait 1 more hour for added safety before using the Movie Camera again.

Pay Attention to Condensation Even Before the Condensation Indication Appears.

- As condensation forms gradually, the Condensation Indication may not appear for 10-15 minutes after the condensation has formed inside.
- In an extremely cold place, the condensation could freeze and turn into frost. In such a case, it takes an additional 2-3 hours for the frost to first melt into condensation and then to be dissolved.

Remedy for a Fogged-up Lens

Set the [POWER ON/OFF] Switch to [OFF] and leave the Movie Camera in this condition for about 1 hour. When the lens has reached about the same temperature as its surroundings, it automatically clears up.

■ Video Heads Clogging and Remedy

If the video heads (which contact the tape) are dirty, the playback picture contains rectangular blocks of picture noise or the whole screen becomes blue. If they are very dirty, the recording performance deteriorates and in the worst case, recording may not be possible at all.

Causes of Dirty Video Heads

- A lot of dust in the air.
- High-temperature and high-humidity environment.
- Damaged tape.
- Long-time use.

Periodic Inspection

To ensure optimum picture quality, we recommend that you have worn out parts such as video heads replaced after approximately 1000 hours of use. (However, this depends considerably on the conditions of use such as temperature, humidity and dust.)

中文

■ 冷凝

確認內部是否已經形成冷凝，並對冷凝進行處理。

在您打開攝錄影機的電源後，若冷凝指示閃爍時，說明攝錄影機內部已經形成冷凝。在此情況下，攝錄影機會自動在幾秒鐘後關閉電源。處理方法如下：

1 取出錄影帶。
所有其它的功能都不會工作。根據冷凝程度，有時可能無法取出錄影帶。在此情況下，請等待2、3小時後再取出錄影帶。

2 打開磁帶室蓋，並等待2、3小時。
所需時間將取決於冷凝程度和環境溫度。

3 2、3小時後，打開攝錄影機並檢查冷凝指示是否消失。
為了更加安全，在重新使用攝錄影機之前，即使冷凝指示不再顯示，也請再等待1小時。

即使在冷凝指示出現以前，也應注意冷凝。

- 由於冷凝是逐漸形成的，在內部已經形成了冷凝後10～15分鐘之內，也可能不會出現冷凝指示。
- 在特別寒冷的地區，濕氣可能已經凍結而變為白霜。在此情況下，需要額外等待2、3小時，以便使凍霜首先溶化為冷凝，然後再將其消除。

霧蒙鏡頭的處理

將[POWER ON/OFF]開關設置在[ON]，使攝錄影機在此狀況下停留約1小時。當鏡頭已經達到與其環境溫度大致相等的溫度時，蒙霧將自動得到清除。

■ 影像磁頭堵塞和修理

如果影像磁頭（與錄影帶接觸）部分很髒，播放的圖像將會有方塊狀的圖像雜訊或整個屏幕變為藍色。若磁頭非常髒時，將降低拍攝性能，最壞的情況下，有可能完全無法進行拍攝。

影像磁頭髒污的原因

- 空氣的灰塵過多：
- 處於高溫和高濕的環境之中：
- 錄影帶已經損壞：
- 使用時間過長。

定期檢查

為了確保最佳畫質，建議您在約1000小時的使用後，更換影像磁頭等已經磨損的部件（然而，這將在很大方面取決於溫度、濕度和灰塵等使用狀況如何）。

ENGLISH

■Optimum Use of the Battery

Special Characteristics of the Battery

This Battery is a rechargeable lithium-ion battery. Its ability to generate electric energy is based on an internal chemical reaction. This reaction is easily influenced by ambient temperature and humidity, and the useful operation time that the Battery can provide becomes shorter at high and low temperatures. When used in extremely cold surroundings, the Battery may only be able to provide approximately 5 minutes of operation time. If the Battery becomes extremely hot, a protection function is activated and prevents the use of the Battery for some time.

After Use Always Take Out the Battery.

Be sure to remove the Battery from the Movie Camera. (If it is left in the Movie Camera, a small amount of electric current is consumed even if the Movie Camera is turned off.) Leaving the Battery inserted in the Movie Camera for a very long time could cause it to become excessively discharged, so that it cannot be used any more even after charging.

Discarding a Battery That Has Become Unusable

- The usable life of the Battery is limited.
- Do not throw the Battery in a fire because it could explode.

Keep the Battery's Terminals Clean.

Be careful that the terminals (the two small round opening) do not get plugged up with dust, dirt or other substances.
If you accidentally drop the Battery, confirm that the terminals are not deformed.
Inserting a deformed Battery in the Movie Camera or attaching it to the AC Adaptor could damage the Movie Camera or the AC Adaptor.

中文

■ 電池的最佳利用

電池的特殊性能

該電池為可充電式鋰離子電池。它能在內部化學反應的基礎上，產生電能。這種反應易受環境溫度和濕度的影響，所以在較高和較低的溫度下，電池能夠提供的操作時間會縮短。當在極冷的環境下進行使用時，該電池也許僅能提供約5分鐘的操作時間。若電池變得極熱時，保護功能會啟動，以免在一定的時間內使用電池。

使用之後最好取出電池。

必須從攝錄影機上取出電池（若電池留在攝錄影機之內時，即使攝錄影機已經關閉，仍將消耗少量的電能）。將電池插入攝錄影機內時間過長時，可能會導致其放電過度，以至於充電之後，使其再也無法得到使用了。

丟掉不能用的電池時

- 電池的可用壽命是有限的。
- 勿將電池丟在火中，以免發生爆炸。

應使電池端子保持乾淨。

小心勿讓端子（兩個小圓開口）插入灰塵、髒跡或其它物質。
若意外摔落電池時，請確認其端子是否變形。
將變形的電池插入攝錄影機或將其安裝在交流轉接器上時，將會損壞攝錄影機或交流轉接器。

ENGLISH

■Precautions for Storage

Before storing the Movie Camera, take out the cassette and remove the Battery.
Store all equipment in a dry place where the temperature remains relatively constant.
(Recommended temperature is 15°C-25°C and recommended relative humidity is 40%-60%.)

Movie Camera
- Wrap it with a soft cloth to prevent dust from entering.

Battery
- Extremely low or high temperature shortens the Battery life.
- Storing it in places with oily smoke and a lot of dust could cause the terminals to get rusty and this can result in malfunction.
- **Do not allow metal objects (such as necklaces and hair pins) to touch the battery terminals. Short-circuiting may occur and generate heat, and touching it in this condition could inflict serious burns.**
- Store the Battery in discarged condition. If you store the Battery for a long time, we recommend that you charge it once a year and completely use up the charge before storing it again in discharged condition.

Cassette
- Rewind the tape to its beginning before storing.
  Leaving the cassette with the tape stopped halfway for more than 6 months (depending on the storing condition) loosens the tape. Be sure to rewind it to the beginning.
- Put the cassette in its case and store it.
  Dust, direct sunlight (ultraviolet rays) and humidity could damage the tape. Dust contains hard mineral particles and cassettes with dust damage the video heads and other parts of the Movie Camera. Make it a habit to always put the cassette back in its case.
- Completely wind the tape forward and then rewind it once every half year. Leaving the cassette for more than a year without winding/rewinding it may deform the cassette because of swelling and shrinking of the tape due to changes in temperature and humidity. Also, the tape may stick together.
- Do not place the cassette near strongly magnetized objects or equipment.
  The tape surface is coated with microscopic magnetic particles and they record signals. Such objects as magnetic necklaces and toys have stronger magnetic force than commonly thought, and this could erase the recorded contents and cause noise in picture and sound.

中文

■ 存放注意事項

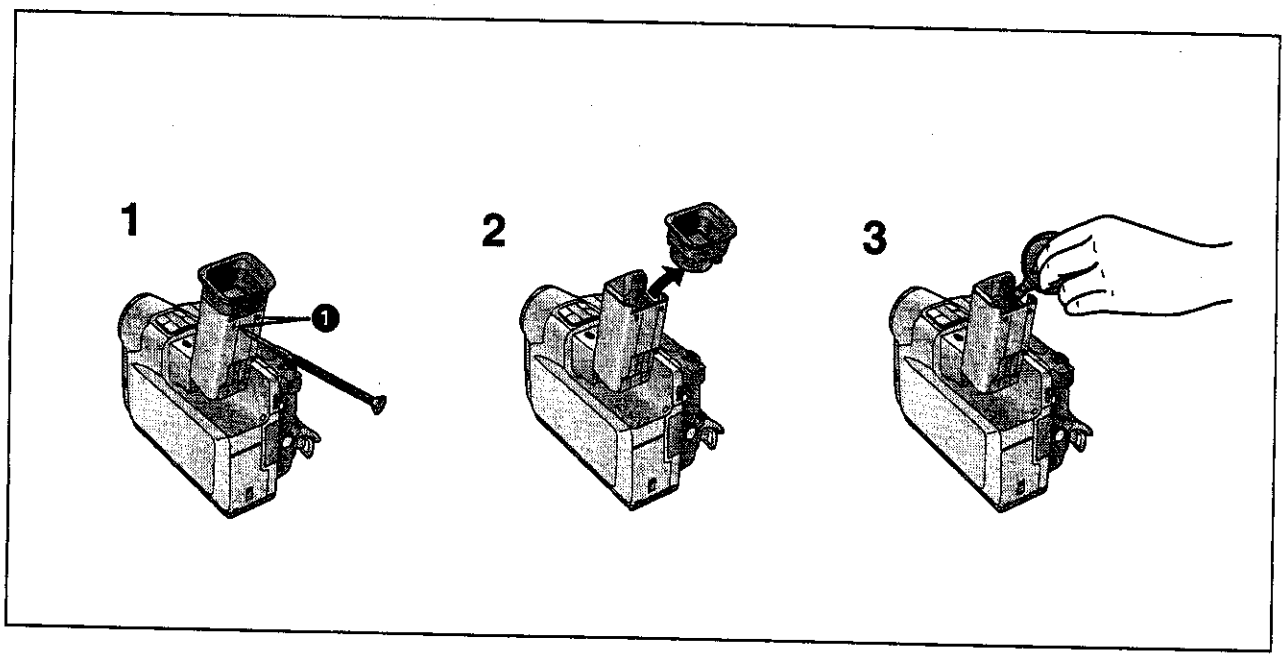
存放攝錄影機之前，應取出錄影帶和電池。
應將所有的設備存放在溫度相對比較穩定的乾燥之處。
(推薦溫度為 15℃~25℃，推薦相對濕度為 40%~60%。)

攝錄影機
- 用軟布擦拭，以免灰塵進入其內。

電池
- 極低和極高的溫度會縮短電池壽命。
- 將其存放在油煙很重或灰塵濃厚之處時，將使端子變得很髒，從而導致功能失常。
- **勿讓金屬物品(如項鏈和髮夾等)接觸電池端子。否則，可能會發生短路和發熱，在此情況下接觸電池時，可能會導致嚴重的燙傷。**
- 在電池放電狀態下，若長期儲存電池時，建議您每年進行一次電池充電，並在放電狀態下重新存放之前，將電量完全用盡。

錄影帶
- 存放前，將錄影帶倒轉到頭。
  讓磁帶停在半中腰，而將錄影帶存放 6 個月 (取決於其存放狀態) 以上時，將使錄影帶鬆弛。故務必將其倒轉到頭。
- 將錄影帶放在盒中，然後再存放。
  否則，灰塵、直射陽光 (紫外線) 和濕氣可能會損壞錄影帶。含有堅硬的礦物微粒的灰塵和帶有灰塵的錄影帶，可能會損壞攝錄影機的影像磁頭和其它部分。要養成隨時將錄影帶放回盒中的習慣。
- 每個半年，應將錄影帶完全前倒或後倒一次。讓錄影帶未前倒和後倒而超過一年時，由於溫度和濕度變化而引起磁帶的膨脹或收縮，因此可能會使錄影帶變形。而且，還可能會造成錄影帶粘接在一起。
- 勿將錄影帶置於磁場強烈的物品和設備附近。

錄影帶表面鍍有極小的磁性微粒，可錄製信號。有些物品，如磁性項鏈和玩具等帶有普通不可想像的強烈磁力，這些物品可能會抹消拍攝的內容和造成圖像和聲音失真。



ENGLISH

■Lens Hood

- If you want to attach a filter from the Filter Kit (optional), be sure to first remove the Lens Hood.
  However, during recording in the Cinema Mode with a filter attached, the four corners of the picture may become dark (vignetting effect), when you push the [W/T] Zoom Lever toward [W].

■Cleaning the Finder

If dust has entered the Finder, clean it in the following way:

1 **Unscrew the screw ❶.**
2 **Remove the Eyecup.**
3 **Remove the dust with a blower brush (not supplied).**
4 **Reattach the Eyecup.**
5 **Tighten the screw ❶.**

■Repeat Playback

- If you keep the Play Button [▶] pressed for more than 5 seconds, the Movie Camera switches over to the Repeat Playback Mode and the [R▷] Indication appears. (To cancel the Repeat Playback Mode, set the [POWER ON/OFF] Switch to [OFF].)

中文

■ 鏡頭遮光罩

- 如果您打算用濾光鏡組件 (選購品) 來安裝濾光鏡時，須首先取下鏡頭遮光罩。
  然而，在攝錄影機裝有濾光鏡的情況下進行拍攝中，若朝[W]方向按了[W/T]變焦柄時，圖像的四角可能會變暗 (漸暈效果)。

■ 電子尋像器的清潔

若電子尋像器中進入了灰塵，請依下列方法進行清潔：

1 **擰鬆螺絲 ❶。**
2 **取下目鏡。**
3 **用吹風刷 (非附件) 清除灰塵。**
4 **重新裝上目鏡。**
5 **擰緊螺絲 ❶。**

■ 重復放影

- 如果您持續按住放影[▶]鈕 5 秒鐘以上，攝錄影機將切換至重復放影狀態，並會出現[R▷]指示 (取消重復放影狀態時，請將[POWER ON/OFF]開關設置在[OFF])。

ENGLISH

Glossary

■Digital Video System

In the digital video system, picture and sound are converted into the digital signals and recorded onto tape. This completely digital recording allows recording and playback of picture and sound with minimum quality deterioration.
In addition, such data as Time Code, Date and Time are also automatically recorded as digital signals.

Features

- Superior picture resolution
- Excellent signal-to-noise ratio
- Stable pictures
- Minimised quality deterioration in dubbing
- Minimised cross colour distortion
- PCM digital sound
- No picture deterioration in LP Mode
- 6.35 mm-wide tape
- Compact cassette with long recording time
- Minimised quality deterioration in editing
- Time Code editing

Compatibility with S-VHS or VHS Cassettes

As this Movie Camera uses a digital method for recording picture and sound, there is no compatibility with conventional S-VHS or VHS video equipment using analog recording methods.
In addition, the size and shape of the cassette are completely different.

Compatibility with Output Signals

As the video and audio signals output from the audio and video output sockets are analog — the same as in conventional video systems — you can connect this Movie Camera to your S-VHS or VHS VCR or TV for playback.

PCM Sound

For recording of the sound, this Movie Camera offers the choice between two different PCM Audio Recording Modes.

- 16 bit 48 kHz 2 channels
- 12 bit 32 kHz 4 channels

The "16-bit, 48 kHz, 2 channels" Mode offers superior recording sound quality.
The "12 bit, 32 kHz, 4 channels" Mode lets you record the original sound on two channels and the dubbed sound on two separate channels.

Sub Code

The digital recording system offers the added capability of recording sub code containing various data.
The following data is recorded as sub code on this Movie Camera:

- Time code
- Recording date and time
- Index signals for locating the recorded still images recorded in the Photoshot Mode
- Index signals for locating the beginning of recorded scenes marked with index signal

中文

用語解説

■ 數位影像系統

在數位影像系統中，圖像和聲音被轉換成數位信號，並被錄製在磁帶上。這種全數位錄製方式，可進行質量損失極少的圖像和聲音的拍攝和放影。
另外，諸如時間編碼、日期和時間等數據也可自動錄製為數位信號。

特色

- 優異的圖像清晰度
- 傑出的信噪比
- 穩定的畫面
- 拷貝中的品質損失最低
- 交叉色彩失真最低
- PCM數位音響
- LP狀態下無圖像品質降低
- 6.35mm寬錄影帶
- 拍攝時間長的小巧磁帶
- 編輯中的品質損失最低
- 時間編碼編輯

與S-VHS或VHS錄影帶不兼容

由於該攝錄影機採用數位方式來拍攝圖像和聲音，所以與一般的採用模擬拍攝式的S-VHS或VHS影像設備無兼容性。
另外，錄影帶的尺寸和形狀也完全不同。

與輸出信號的兼容性

由於來自音頻和影像輸出插座的影像和音頻信號輸出為模擬的，與一般影像系統相同，所以您可將該攝錄影機連接至您的S-VHS或VHS錄放影機或電視機進行放影。

PCM音響

為了錄製聲音，該攝錄影機準備了兩種不同的PCM音頻錄製狀態以供選擇。

- 16位48kHz雙聲道
- 12位32kHz四聲道

"16位，48kHz，雙聲道"狀態可提供優異的錄製音質。
"12位，32kHz，四聲道"狀態可讓您在[兩個分離的聲道]上錄製原來的聲音，並在[雙聲道]上拷貝聲音。

副編碼

數位錄製系統可提供錄製含有各種數據之副編碼的額外能力。
該攝錄影機上，下列數據將被錄製為副編碼：

- 時間編碼
- 拍攝數據和時間
- 用於定位在拍照狀態下攝製的已拍靜止圖像（拍照）的索引信號
- 用於定位帶索引信號標誌的場景之開頭。

ENGLISH

■Focus

If you look at an object through a magnifying glass and move it closer or further away from your eye, you will reach a point where the object becomes clearly visible. Being focused or in focus means that the subject can be seen with optimum clarity and sharpness.

Human Eyes

Human eyes have lenses as well, and when we look at objects at different distances, the shape of these lenses changes automatically so that we can always see these objects clearly.

Movie Camera

The image of the subject enters the Movie Camera through the lens and is converted into an electric signal (video signal) for recording onto magnetic tape. The focus is adjusted either manually or automatically by moving a focusing lens.

Auto Focus Adjustment

The Auto Focus System automatically moves the internal focusing lens forward or backward and adjusts the focus so that the subject can be seen clearly.
The Auto Focus Adjustment has the following characteristics:

- It adjusts until the vertical contours of the subject are as sharp and clean as possible.
- It adjusts the focus on the subjects with strong contrast.
- It adjusts the focus on the subject in the centre of the Finder.

  Unlike human eyes, the lens of the Movie Camera cannot instantaneously change the focus from a nearby to a distant subject.

中文

■ 聚焦

如果您通過放大鏡觀看一個目標物，將放大器遠離或靠近您的眼睛，便可找到一個能夠清晰地看見該目標物的位置。被聚焦或聚焦表示目標物以最好的清晰度和鮮明度被看到。

人眼

人類的眼睛內也有鏡頭。當我們看不同距離處的目標物時，這些鏡頭的形狀自動改變，所以我們總能清楚地看到這些目標物。

攝錄影機

目標物的形狀通過鏡頭進入攝錄影機，並被轉換成電信號(影像信號)錄製在磁帶上。聚焦是依靠手動或自動移動聚焦鏡頭來進行調節的。

自動聚焦調節

自動聚焦系統自動前後移動內部聚焦鏡頭，並調節聚焦，使目標物能清晰可見。
自動聚焦調節具有下列特性：

- 它將調節目標物的垂直輪廓，使其盡可能鮮明和清晰。
- 它將調節目標物的聚焦，使其具有最大的對比度。
- 它將調節電子尋像器中央部分的目標物。

  不像人眼，攝錄影機的鏡頭不能從近處向遠處的目標物，立即改變聚焦。

ENGLISH

For the following subjects and recording situations, the Auto Focus System cannot provide precise adjustment. Use the Manual Focus Mode instead. (➔ 34)

❶ **Recording subjects with a part of it near the Movie Camera and another part far away from it**
As the Auto Focus adjusts on the centre part of the image, it is often impossible to bring the nearby and distant parts of the subject into focus.
When you want to record a person with a distant mountain in the back, it is not possible to focus on both.

❷ **Recording subjects behind glass covered with dirt or dust**
As the focus is adjusted on the dirty glass, the subject behind the glass is out of focus. When recording a subject across a street on which cars are running, the focus may be adjusted on the cars.

❸ **Recording subjects in dark surroundings**
As the amount of light information entering through the lens is greatly reduced, the Movie Camera cannot adjust the focus precisely.

❹ **Recording subjects surrounded by the objects with shiny surfaces or much light reflection**
As the Movie Camera adjusts the focus on the objects with shiny surfaces or much light reflection, the subject may go out of focus.
Therefore, when recording at a lake or the sea, evening scenes, fireworks or under special types of lighting, the subject may be out of focus.

❺ **Recording fast-moving subjects**
As the internal focusing lens is moved mechanically, it cannot follow fast-moving subjects without delay. Therefore, subjects like children running back and forth may temporarily go out of focus.

❻ **Subjects with weak contrast**
As the Movie Camera adjusts the focus based on vertical contours in the picture, subjects with little contrast such as a white wall may be out of focus.

中文

對於下列目標物和拍攝狀況，自動聚焦系統不能提供精確的調節。請用手動聚焦狀態代替。(➔34)

❶ **一部分靠近攝錄影機、而另一部分遠離攝錄影機的目標物。**
因為自動聚焦是調節畫面的中心部分，所以常常很難使目標物的近處和遠處都能同時聚焦。

❷ **拍攝被髒污或灰塵覆蓋的玻璃之後的目標物**
由於聚焦是對在髒污的玻璃之上，所以玻璃之後的目標物將無法得到聚焦。當拍攝汽車穿梭不斷的街道對面的目標物時，聚焦可能會對在汽車上。

❸ **拍攝黑暗環境中的目標物**
由於進入鏡頭的光亮信息將被受到極大地降低，所以攝錄影機將無法進行精確地聚焦。

❹ **拍攝被發亮表面或強烈反光物體所包圍的目標物**
因為攝錄影機將調節具有發亮表面或有強烈反光之物體的聚焦，所以目標物可能會散焦。
因此，當在湖邊或海邊、夜景、焰火或在特殊燈光下拍攝時，目標物可能會散焦。

❺ **拍攝快速移動的目標物**
因為內部聚焦鏡頭是機械式地移動，可能無法及時地跟上快速移動的目標物。
所以，對於孩子來回跑步之類的目標物，可能會暫時散焦。

❻ **對比度微弱的目標物**
因為攝錄影機是根據畫面中的垂直輪廓進行聚焦調節，所以，對比度極弱的目標物，如白牆等可能會散焦。

ENGLISH

■White Balance Adjustment

While most recording with a Movie Camera is probably done outdoors under sunlight, video recording is also done very often under artificial light sources, both indoors and outdoors. However, each of these light sources gives the subject slightly different colours.

Human Eyes

Human eyes can easily adjust to different kinds of lighting and see an object with the same colours even under different lighting.

Movie Camera

Unlike human eyes, the Movie Camera does not have the innate ability to adapt to changes in lighting, and they influence the colours being recorded. Therefore, depending on the light source, the picture may be recorded with a bluish or reddish tint. To minimise the influence of the lighting on the colours of the subject, an adjustment called White Balance Adjustment is necessary.

White Balance Adjustment

The White Balance Adjustment determines the colour of the light and adjusts the colours so that white remains pure white. As white is the basic colour of the entire colour spectrum, if white is reproduced correctly, the other colours are correct and natural, too.

Auto White Balance Adjustment

This Movie Camera stores the optimum settings for several common light sources in memory. The Movie Camera judges the recording situation by determining the tint of the image received through the lens and by the White Balance Sensor (➔ 14), and it selects the setting for the most similar tint. This function is called Auto White Balance Adjustment.
However, as the white balance settings for only several light sources are stored in memory, the white balance is not correctly adjusted for lighting conditions other than those stored in memory.

For the range of different types of lighting within which the Auto White Balance Function can provide precise adjustment, refer to the chart above (➔ 152). For recording under lighting conditions outside this range, the Auto White Balance Function does not work correctly, and the recorded picture has a red or blue cast. However, the same applies,if the subject is lit by more than one light source, even if these light sources are within the above range.

中文

■ 白色平衡調節

在室外太陽光之下，可進行攝錄影機的大部分拍攝操作，同時也可用各種不同的人工光源，在室內和室外進行影像拍攝。然而，這些光源將給目標物帶來稍微不同的顏色。

人眼

人眼可輕而易舉地調節各種不同光線，即使在不同的燈光下，也能以同樣的色彩觀看物體。

攝錄影機

攝錄影機不像人眼，沒有天生的能力來適應那些對拍攝色彩有很大影響的光線變化。所以，根據光源不同，畫面可能會偏藍或泛紅。為了使光源對目標物的色彩影響降至最低，有必要進行所謂的白色平衡調節。

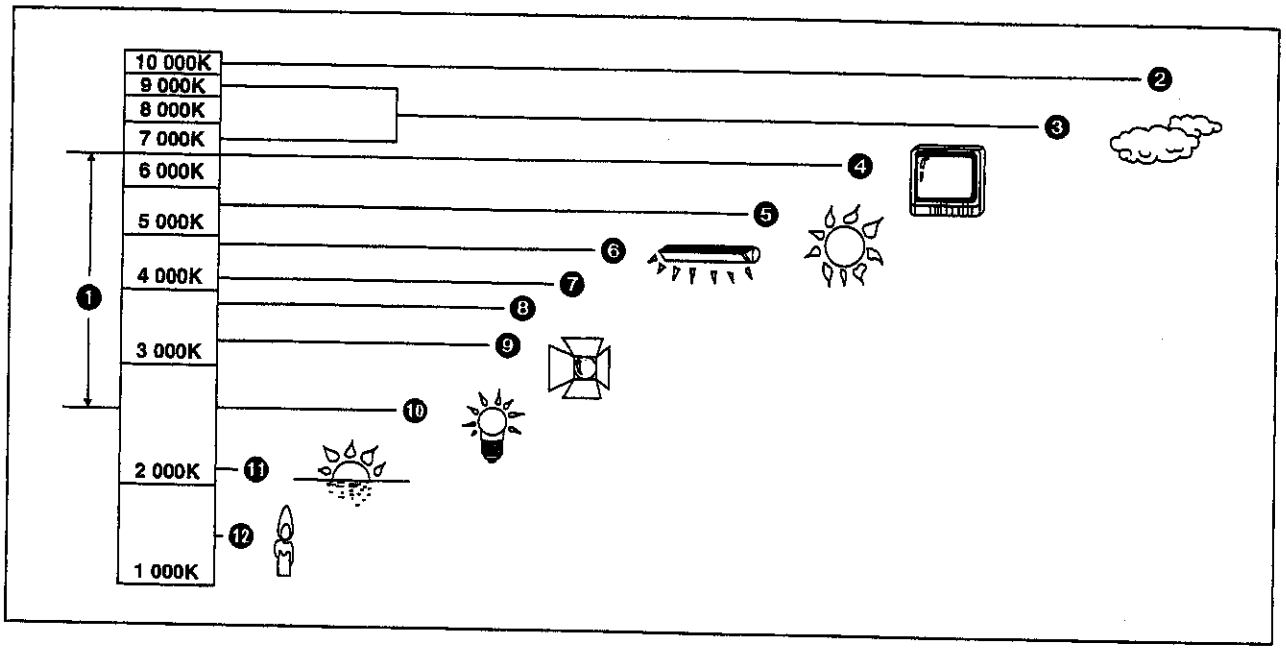
白色平衡調節

白色平衡調節將決定燈光的色彩，並調節色彩，以使保白色保持純白。由於白色是整個彩色光譜的基本色彩，所以，若白色得到正確地再生，則其它色彩也會保持正確和自然。

自動白色平衡調節

本攝錄影機在存儲器中儲存有幾種普通光源的最佳設定。攝錄影機通過對鏡頭和**白色平衡感應器** (➔ 14) 所接收的圖像色調進行估量，來判斷拍攝狀態，然後選擇最類似色調的設定。這種功能即被稱為自動白色平衡調節。
然而，由於存儲器中僅儲存了幾種光源的白色平衡設定。所以，對於存儲器中所存儲之外的其他燈光條件，將無法進行正確的白色平衡調節。

有關自動白色平衡功能能夠提供精確調節的不同類型燈光的範圍，請參看列表 (➔ 152) 。有關此範圍之外的燈光條件下的拍攝，自動白色平衡功能將無法正常工作，且拍攝的圖像將偏紅或泛藍。當目標物是由一種以上的光源照射的時，即使這些光源全都在上述範圍之內，其結果也相同。



ENGLISH

■Colour Temperature

Every light source has its own colour temperature measured in Kelvin (K). The higher the Kelvin value, the more bluish the light; the lower the value, the more reddish the light. The Kelvin value is related to the tint of the light, but not directly to its brightness.
The range ❶ indicated in the illustration above shows the light sources for which this Movie Camera can provide precise white balance adjustment and, therefore, natural colours in the recorded pictures, when using the Full Auto Mode. For light sources outside this range, adjust the white balance manually (➔ 82). Also, additional lighting may be necessary.

❶ Control range of this Movie Camera's Auto White Balance Adjustment Mode

❷ Blue sky

❸ Cloudy sky (Rain)

❹ TV screen

❺ Sunlight

❻ White fluorescent lamp

❼ 2 hours after sunrise or before sunset

❽ 1 hour after sunrise or before sunset

❾ Halogen light bulb

❿ Incandescent light bulb

⓫ Sunrise or sunset

⓬ Candlelight

中文

■ 色温

每種光源都具有用絕對溫度 (K) 來衡量的特有色溫。絕對溫度值越高，光源的顏色就越藍；其值越低，光源的顏色就越紅。絕對溫度值與光線的色調有關，但與亮度沒有直接關係。
上圖中的範圍 ❶ 表示了該攝錄影機可以提供精確的白色平衡調節的光源，所以當使用全自動狀態時，拍攝的圖像將具備自然色彩。對於此範圍之外的光源，請手動調節白色平衡 (➔82)。而且，也可能需要增添光源。

❶ 該攝錄影機的自動白色平衡調節狀態的控制範圍
❷ 藍天
❸ 陰天 (下雨)
❹ 電視機屏幕
❺ 太陽光
❻ 白色熒光燈
❼ 日出2小時後或日落2小時前
❽ 日出1小時後或日落1小時前
❾ 鹵素燈
❿ 白熾燈
⓫ 日出或日落
⓬ 蠟燭光

ENGLISH

■Time Code

Time Code signals are the data which indicates the time in hours, minutes, seconds and frames (25 frames/sec). Having this data included in the recording gives every single picture on the tape its own address.

- Time Code is automatically recorded as part of the sub code with every recording you make.
- When you insert a new (previously unrecorded) cassette, the Time Code automatically starts from zero. If you insert a recorded cassette, the Time Code continues where the time code of the last previous scene stopped. (In this case, the zero indication [0h:00m:00s:00f] may appear after inserting the cassette, but when the recording starts, the Time Code records from the previous value).
- You cannot reset the Time Code to zero by pressing the [RESET] Button.
- In playback modes other than the Normal Playback Mode, the Time Code may not be displayed (or not be correct).
- Unless the Time Code is recorded continuously from the beginning of the tape, precise editing may not be possible. To ensure that the Time Code will be recorded without interruption, we recommend that you use the Camera Search Function (➜ 56) or Blank Search Function (➜ 58) before starting to record a new scene.

■Memory Stop Function

The Memory Stop Function is convenient for the following operations.

Rewinding or fast-forwarding the tape to a desired position

1 **Reset the Tape Counter at the tape position from which you want to play back later.**
2 **Set [DISPLAY] on the Menu to [MEMORY]. (➜ 118-124)**
3 **Start playback or recording.**
4 **After playback or recording is finished:**
Press the [VCR/CAMERA] Button so that the [VCR] Lamp lights.
5 **Rewind the tape.**
The tape automatically stops approximately at the position at which you reset the counter to zero.

Stopping the editing automatically in the audio dubbing

1 **Reset the Tape Counter to zero at the tape position at which you want the editing to stop.**
2 **Set [DISPLAY] on the Menu to [MEMORY].(➜ 118-124)**
3 **Play back a still picture at the point at which you want the audio dubbing to start.**
4 **Start the audio dubbing.**
The audio dubbing automatically stops approximately at the position at which you reset the counter to zero.

中文

■ 時間編碼

時間編碼信號是用小時、分、秒和幀 (25幀/秒) 來表示時間的數據。拍攝內容中含有這些數據，將給錄影帶上的每幅圖像提供自己的地址。

- 在您進行每次拍攝時，時間編碼將自動被作為副編碼部分而拍攝。
- 當您插入新的 (以前未拍過的) 錄影帶時，時間編碼將自動從零開始。如果您插入已拍錄影帶時，時間編碼會從上次場景停止時的時間編碼處接續下去。在此情況下，插入錄影帶後，可能會出現零指示 (0h:00m:00s:00f)，但開始拍攝時，時間編碼將從以前的值開始出現。
- 不能按[RESET] (復原) 鈕，將時間編碼復原至零。
- 在普通放影之外的放影狀態下，可能不會顯示時間編碼 (或顯示不當)。
- 除非時間編碼是從錄影帶開頭連續錄製的，否則，將無法進行精確的編輯。為了確保時間編碼錄製中沒有中斷，建議您在開始拍攝新場景之前，使用攝錄影機尋影功能 (➜ 56) 或空白尋影功能 (➜ 58)。

■記憶停止功能

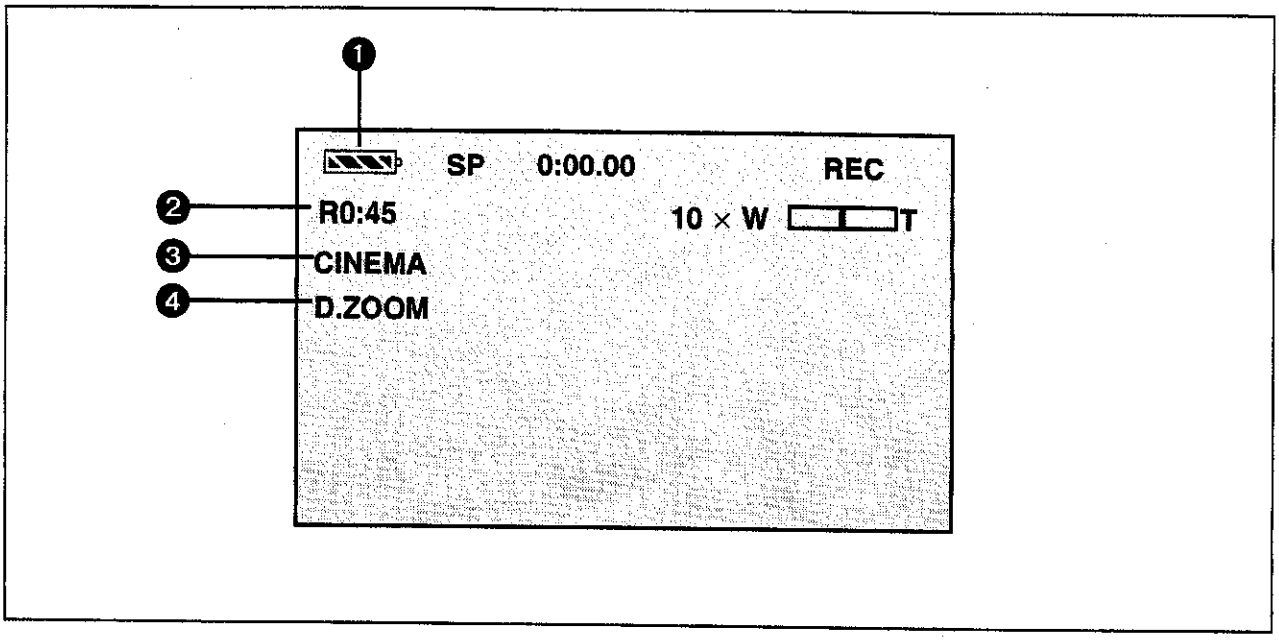
記憶停止功能便於下列操作：

將錄影帶倒轉或快進至需要的位置時

1 **在您以後打算播放的磁帶位置，使磁帶計數器復原至零。**
2 **將菜單上的[DISPLAY] (顯示) 項，設定為[MEMORY] (記憶)。(➜ 118~124)**
3 **開始放影或錄影。**
4 **在放影或拍攝結束後：**
按[VCR/CAMERA] (錄放影機/攝錄影機) 鈕，使[VCR]燈亮起。
5 **倒轉錄影帶。**
在您將計數器復原至零的大致位置，錄影帶會自動停止。

在音頻拷貝中自動停止編輯時

1 **在您打算停止編輯的磁帶位置，使磁帶計數器復原至零。**
2 **將菜單上的[DISPLAY]項，設定為[MEMORY]。(➜ 118~124)**
3 **在您打算開始音頻拷貝之處，播放靜止圖像。**
4 **開始音頻拷貝。**
在您將計數器復原至零的大致位置，音頻拷貝會自動停止。



ENGLISH

Indications in the Finder

❶ Remaining Battery Power
As the remaining battery power decreases, the indication changes as follows: → → → → →
When the battery is completely discharged, the ( ) Indication flashes.
(When you are using the AC Adaptor, the Indication may appear, however, this has no meaning in this case.)

❷ Remaining Tape Time
The remaining tape time is displayed in minutes. (When it becomes less than 3 minutes, the indication starts to flash.)
- If a recording lasts less than 15 seconds, the Remaining Tape Time cannot be displayed correctly.
- The displayed remaining tape time may be shorter than the actual remaining tape time.

❸ Cinema Mode (➔ 40)
When recording in the Cinema Mode, this indication is displayed.

❹ Digital Zoom (➔ 36)
When the Digital Zoom Function is activated, this indication is displayed.

Digital Effects (➔ 72)
When a digital effect is activated, the corresponding indication is displayed.

中文

電子尋像器的指示

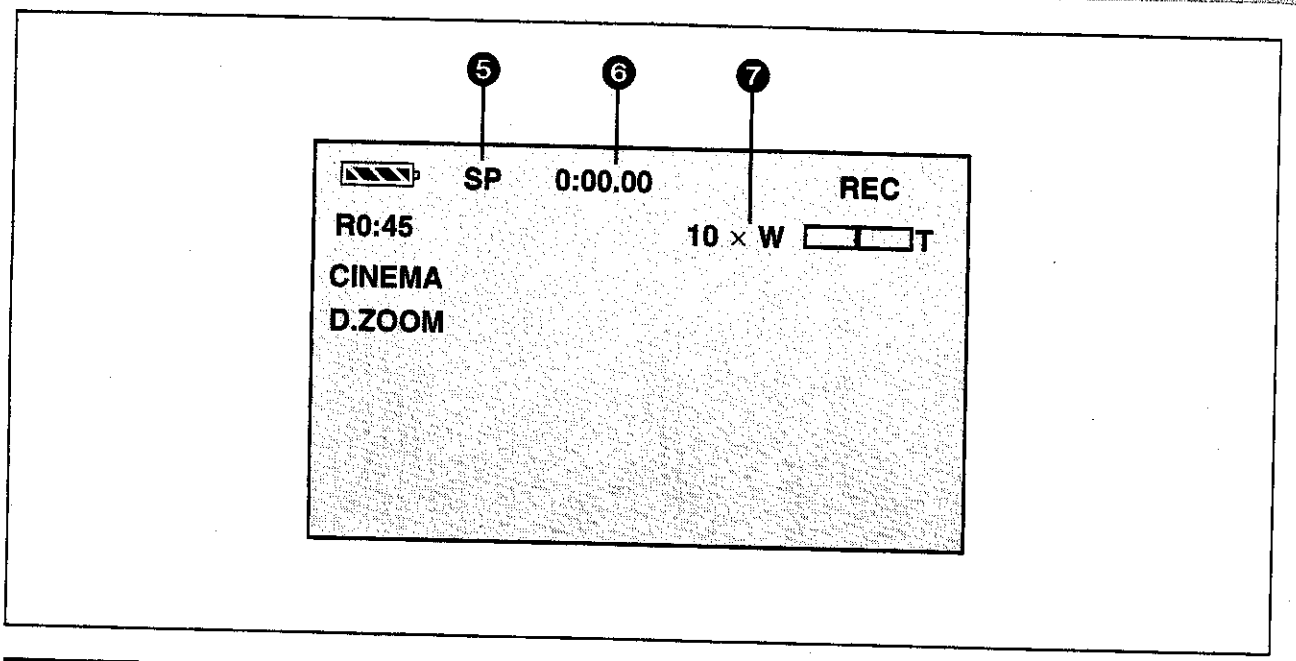
❶剩餘電池電量
隨著剩餘電池電力的減少，指示會如下改變： → → → → →
當電池完全耗盡時， ( ) 指示會閃爍。
(當您使用交流轉接器時，可能會出現 指示，然而，在此情況下將無任何意思。)

❷剩餘磁帶時間
剩餘磁帶時間將以分鐘來顯示。
(當其少於3分鐘時，該指示將開始閃爍。)
- 如果拍攝長度短於15秒時，剩餘磁帶時間將無法得到正確的顯示。
- 顯示的剩餘磁帶時間可能會短於實際的剩餘磁帶時間。

❸電影狀態 (➔ 40)
在電影狀態下進行拍攝時，將出現該指示。

❹數位變焦 (➔ 36)
當數位變焦功能啟動時，將出現該指示。

數位效果 (➔ 72)
當數位效果啟動時，將出現相應的指示。



ENGLISH

❺ Recording Speed Mode (➜ 24)
The selected Recording Speed Mode is displayed.
SP: Standard Mode
LP: Long-play Mode

❻ Tape Counter, Time Code
The Tape Counter, Memory Stop Function or Time Code Indications are displayed.

❼ Zoom Magnification (➜ 36)
When you push the [W/T] Zoom Lever up or down, the Zoom Magnification Indication and the Zoom Gauge are displayed.

Recording Mode Indication (➜ 30)
AUTO: This appears when [MODE] is set to [AUTO] on the Menu.
MNL: This appears when [MODE] is set to [AUTO] on the Menu.

Super Image Stabilizer (➜ 42)
: When the Super Image Stabilizer Function is activated, this indication is displayed.

Audio Recording Mode (➜ 88)
12bit/16bit: The indication of the Audio Recording Mode that was selected for recording is displayed during playback.

All Photoshots Pictures Printing (➜ 112)
AUTOPRINT: This indication is displayed when the Auto Print Function is being used.

中文

❺ 拍攝速度狀態 (➜ 24)
會顯示所選擇拍攝速度狀態。
SP：標準狀態
LP：長時間放影狀態

❻ 磁帶計數器，時間編碼
會顯示磁帶計數器、記憶停止功能或時間編碼指示。

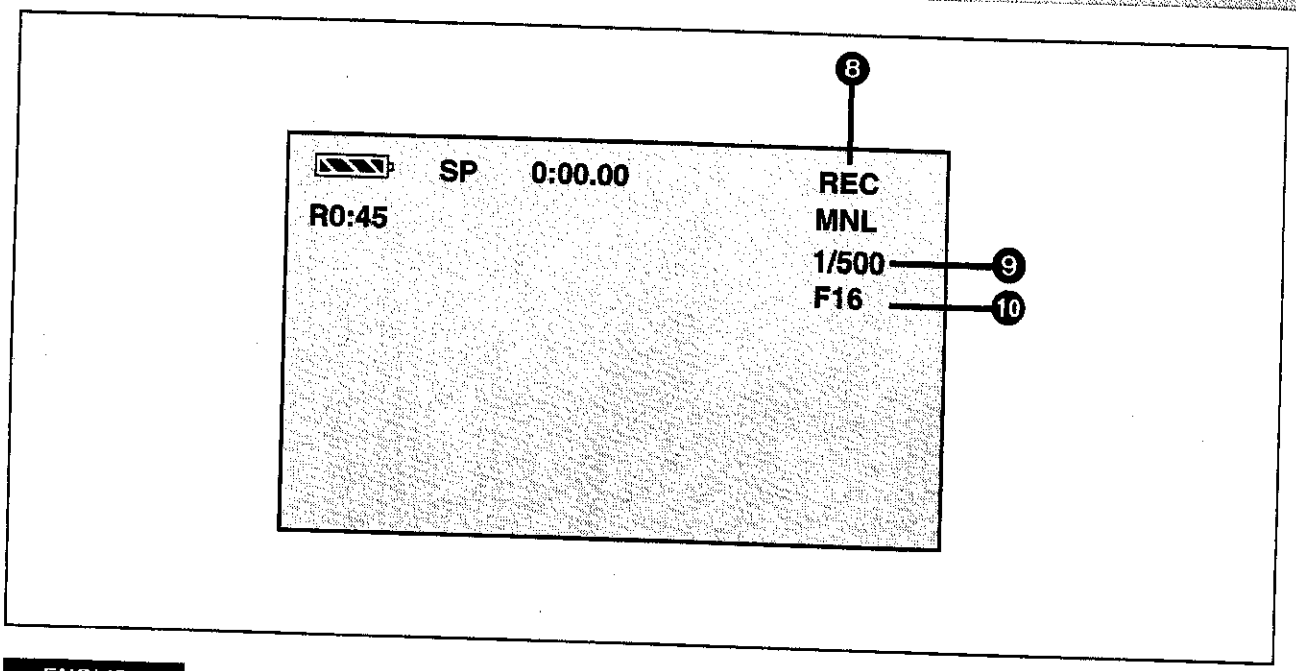
❼ 變焦放大率 (➜ 36)
當您上下按[W/T]變焦柄時，將出現變焦放大率指示和變焦儀指示。

拍攝狀態 (➜ 30)
AUTO：當菜單上的[MODE] (狀態) 被設置在[AUTO] (自動) 時，會出現該指示。
MNL：當菜單上的[MODE]被設置在[MNL] (手動) 時，會出現該指示。

超級畫面穩定 (➜ 42)
：當超級畫面穩定功能啟動時，會出現該指示。

音頻錄製狀態 (➜ 88)
12位/16位：在放影中，會顯示拍攝時所選擇的音頻錄製狀態指示。

全拍照圖像打印 (➜ 112)
AUTOPRINT：當正在使用自動打印功能時，會出現該指示。



ENGLISH

❽ Tape Run Indications

RECORD:	Recording (➜ 30)
PAUSE:	Recording pause (➜ 30)
▷:	Playback (➜ 44) / Camera Search in forward direction (➜ 56)
◁:	Camera Search in reverse direction (➜ 56)
❚❚:	Still playback (➜ 50)
▷▷:	Fast-forward/Cue playback (➜ 44, 46)
◁◁:	Rewind/Review playback (➜ 44, 46)
❚▷ / ◁❚:	Slow playback in forward direction/ Slow playback in reverse direction (➜ 48)
❚❚▷ / ◁❚❚:	Still Advance playback in forward direction / Still Advance playback in reverse direction (➜ 50)
▷▷❙/❙◁◁:	Index Search in forward direction / Index Search in reverse direction (➜ 62, 64)
CHK:	Recording check (➜ 32)
A.DUB▷:	Audio dubbing (➜ 88)
A.DUB ❚❚:	Audio dubbing pause (➜ 88)
PHOTO:	Recording in the Photoshot Mode (➜ 38)
BLANK:	Blank search (➜ 58)
R▷:	Repeat playback (➜ 142)

❾ Shutter Speed

It appears when you manually adjust the shutter speed.(➜ 84)

❿ Iris Value (F Number)

It appears when you manually adjust the iris.(➜ 86)

中文

❽ 錄影帶運行指示

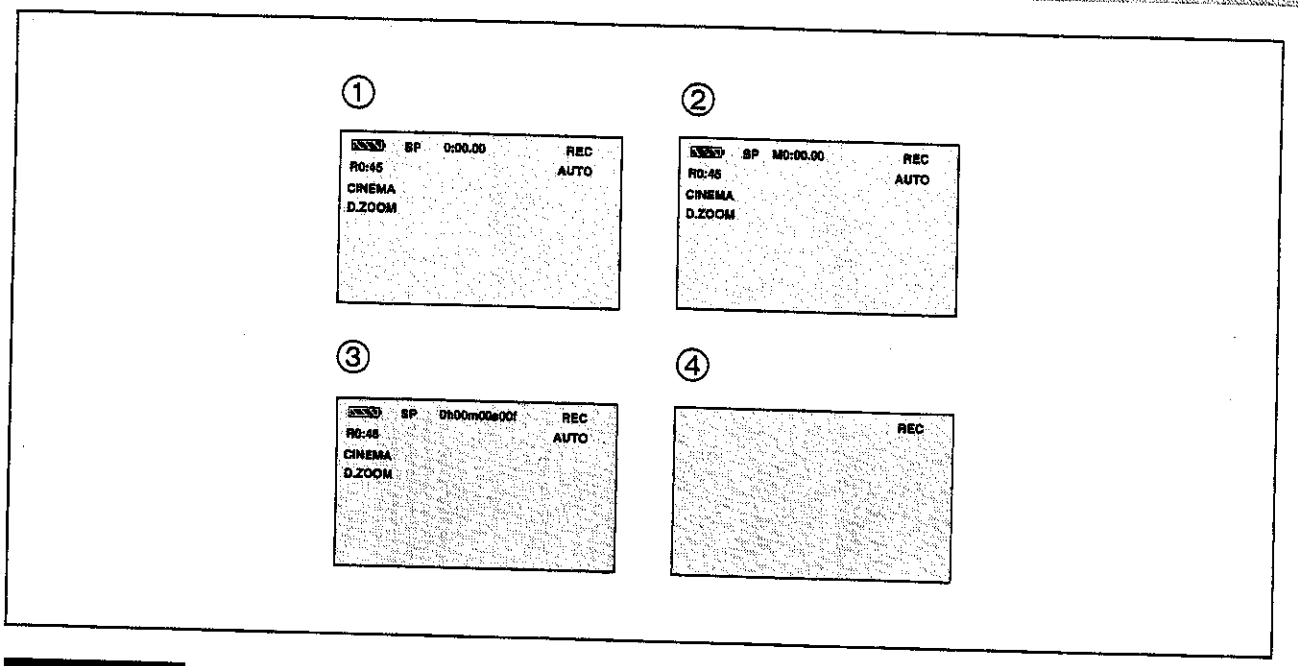
RECORD:	錄影 (➜ 30)
PAUSE:	錄影暫停 (➜ 30)
▷:	放影 (➜ 44) /正向攝錄影機尋影 (➜ 56)
◁:	反向攝錄影機尋影 (➜ 56)
❚❚:	靜止放影 (➜ 50)
▷▷:	快進/快進尋影播放 (➜ 44，46)
◁◁:	倒帶/倒帶尋影播放 (➜ 44，46)
❚▷ / ◁❚:	正向慢動作放影/反向慢動作放影 (➜ 48)
❚❚▷/◁❚❚:	正向靜止步進放影/反向靜止步進放影 (➜ 50)
▷▷❙/❙◁◁:	正向索引尋影/反向索引尋影 (➜ 62，64)
CHK:	拍攝檢查 (➜ 32)
A.DUB▷:	音頻拷貝 (➜ 88)
A.DUB❚❚:	音頻拷貝暫停 (➜ 88)
PHOTO:	以拍照狀態進行拍攝 (➜ 38)
BLANK:	空白尋影 (➜ 58)
R▷:	重復放影 (➜ 142)

❾ 快門速度

當您手動調節快門速度時，會出現該指示。(➜ 84)

❿ 光圈值 (F數字)

當您手動調節光圈時，會出現該指示。(➜ 86)



ENGLISH

Changing the Indications

By changing the setting for [DISPLAY] on the Menu (➔ 118-124) or by repeatedly pressing the [DISPLAY] Button on the Remote Controller(➔ 92), the Counter Display Mode can be changed in the order shown in the above illustrations ① to ④:

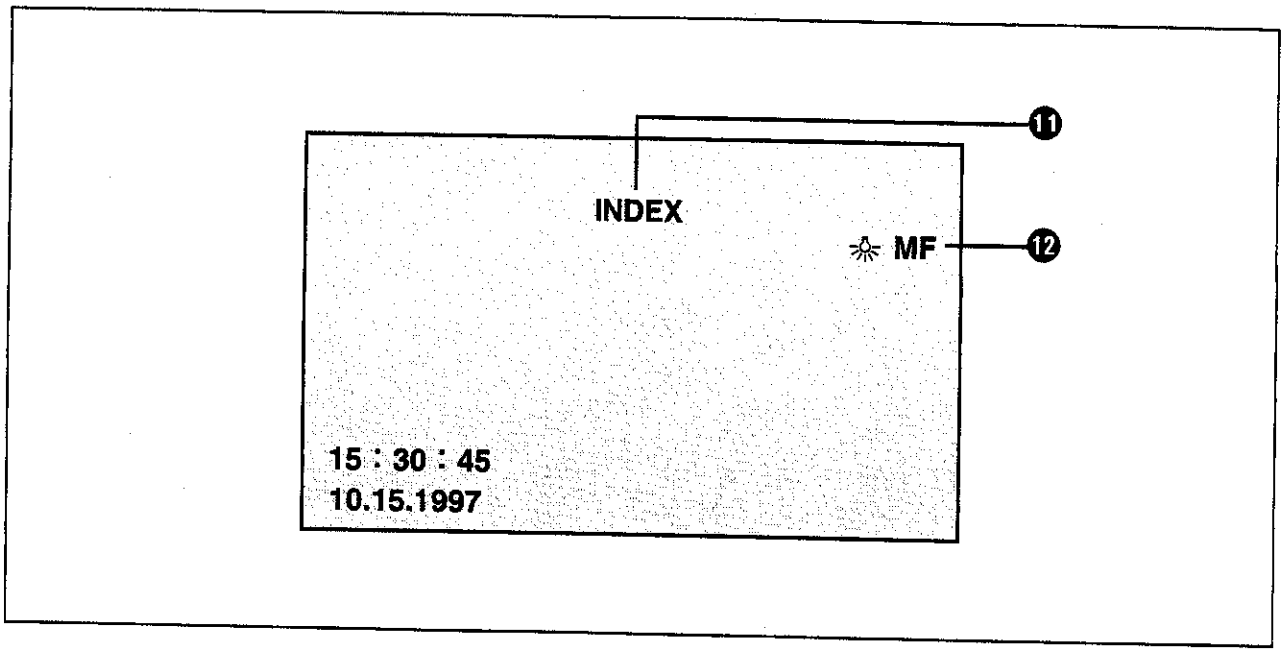
① Tape Counter Indication
② Tape Counter Indication with activated Memory Stop Indication
③ Time Code Indication
④ No Indication
(In this mode, only the Tape Run Indications, Warning/Alarm Indications, Date/Time Indications, the Programme AE Mode Indications, MF Mode Indications, White Balance Mode Indications and Zoom Magnification Indication can be displayed.)

中文

指示變更

改變菜單上的[DISPLAY] (顯示) 設定 (➔ 118~124) ，或重復按遙控器上的[DISPLAY]鈕 (➔ 92) ，可依上圖 ① ~ ④ 所示，依序改變計數器的顯示狀態:

① 磁帶計數器指示
② 帶記憶停止已啟動指示的磁帶計數器指示
③ 時間編碼指示
④ 無指示
(在此狀態下，僅會顯示磁帶運行指示、警告/報警指示、日期/時間指示、程序AE狀態指示、MF (手動聚焦) 狀態指示、白色平衡狀態指示和變焦放大指示。)



ENGLISH

⓫ Index (➜ 60)

INDEX: The [INDEX] indication flashes for a few seconds while an index signal is being recorded.

Search Number (➜ 64)

S1: The figure indicates which number of scene ahead from the present scene is to be played back.

⓬ Manual Focus (➜ 34)

If you select the Manual Focus Mode, the [MF] indication is displayed.
When the Movie Camera is in the Auto Mode, this indication is not displayed.

White Balance Mode (➜ 80)

The White Balance Mode offers the following possible settings:

☼: Indoor (incandescent lamp) Mode
☀: Outdoor Mode
◺: Lock Mode

When the Movie Camera is in the Auto Mode, none of the above 3 indications are displayed.

中文

⓫索引 (➜ 60)

INDEX: 在錄製索引信號中，[INDEX]指示會閃爍幾秒鐘。

尋影號碼 (➜ 64)

S1: 該字符表示從目前的場景至要播放場景之前的場景數。

⓬手動聚焦 (➜ 34)

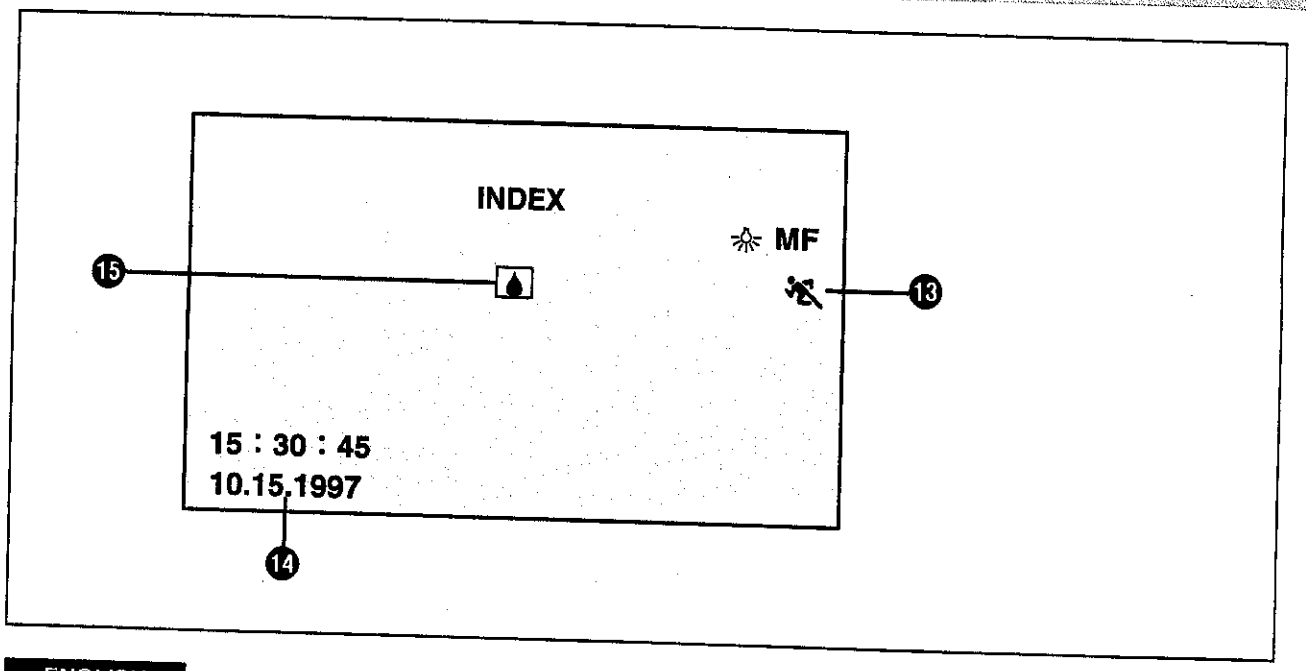
如果您選擇了手動聚焦狀態，會出現[MF] (手動聚焦) 指示。
當攝錄影機處於自動聚焦狀態時，則不會出現該指示。

白色平衡狀態 (➜ 80)

白色平衡狀態將提供下列可能的設定：

☼ : 室內 (白熾燈) 狀態
☀ : 室外狀態
◺ : 室內 (熒光燈) 狀態

當攝錄影機處於自動狀態時，上述3種指示都不會出現。



ENGLISH

⓭ Programme AE Mode (➜ 68)
The Programme AE has the following settings:
- : Sports Mode
- : Portrait Mode
- : Low Light Mode

⓮ Date and Time (➜ 44)
The time is indicated in the 24-hour system.

⓯ Warning/Alarm
When any of the following indications lights or flashes, confirm the condition of the Movie Camera.
- : Condensation has occurred. (➜ 136)
- : The erasure prevention slider of the inserted cassette is closed (set to [SAVE]).
  No cassette is inserted.
- : The built-in battery is discharged. (➜ 128)
- : The heads are dirty.
- END: During recording, the tape has reached its end.
- REMOTE: Wrong Remote Controller Mode is selected. (➜ 100)

中文

⓭ 程序AE狀態 (➜ 68)
程序AE具有下列設定：
- : 運動狀態
- : 素描特寫狀態
- : 弱光狀態

⓮ 日期和時間 (➜ 44)
時間指示為24小時制。

⓯ 警告/報警
當下列指示亮起或閃爍時，請確認攝錄影機的狀況。
- : 已經發生冷凝。(➜ 136)
- : 插入錄影帶的保險滑頭關閉著（設置在[SAVE]）。
  未插入錄影帶。
- : 內藏電池已耗盡。(➜ 128)
- : 影像磁頭很髒。
- END: 拍攝中，錄影帶已走到結尾。
- REMOTE: 遙控器狀態選錯了。(➜ 100)

ENGLISH

Before Requesting Service (Problems & Solutions)

Power Supply

P1: The Movie Camera does not turn on.
S1: Is the Battery or the AC Adaptor connected correctly? Confirm the connection. (➜ 16)

P2: The Movie Camera has turned off automatically.
S2: If you leave the Movie Camera in the Recording Pause Mode for more than 6 minutes, it automatically switches off to protect the tape and to conserve battery power. (➜ 30)

P3: The Movie Camera quickly turns off.
S3-1: Is the Battery discharged? When the Remaining Battery Power Indication is flashing or the [▭] Indication is displayed, the Battery is discharged. Charge the Battery or insert a fully charged Battery. (➜ 156)
S3-2: Has condensation formed? If the Movie Camera is brought from a cold to warm place, condensation may form inside. In this case, the Movie Camera automatically switches off and not operations can be performed except taking out the cassette. Wait until the Condensation Indication disappears. (➜ 136)

Battery

P1: The Battery discharges quickly.
S1-1: Is the Battery fully charged? Charge it until all 4 Charge Lamps on the AC Adaptor light. (➜ 18)
S1-2: Are you using the Battery in a place where the temperature is very low? The ambient temperature greatly influences the Battery's performance. Its operation time becomes shorter in a cold place. (➜ 138)
S1-3: Has the Battery reached the end of its service life? The service life of the Battery is limited. It depends on the way the Battery is used, but when the operation time even after proper charging is too short for normal use, the service life of the Battery has reached its end.

中文

要求服務之前 (問答集)

電源

Q1: 攝錄影機電源不能打開。
A1: 是否已正確地連接了電池或交流轉接器？請確認連接情況。(➜ 16)

Q2: 攝錄影機自動關閉。
A2: 如果您讓攝錄影機處於拍攝暫停狀態超過6分鐘時，本機會自動切斷電源，以保護錄影帶和節省電池電力。(➜ 30)

Q3: 攝錄影機很快關閉電源。
A3-1: 電池是否耗盡？當剩餘電池電力指示閃爍或出現[▭]指示時，說明電池已經耗盡。請給電池充電或插入充足電的電池。(➜ 156)
A3-2: 是否已形成了冷凝？如果將攝錄影機從冷地方帶到暖地方時，內部可能會發生冷凝。在此情況下，攝錄影機會自動關閉，且除了取出磁帶之外，將無法進行其它操作。請等待，直至冷凝指示消失為止。(➜ 136)

電池

Q1: 電池很快耗盡。
A1-1: 電池充電是否充足？請進行充電，直至交流轉接器上的所有4個充電燈都亮起為止。(➜ 18)
A1-2: 是否在溫度極低的地方使用電池？環境溫度對電池的性能有很大的影響。在寒冷的地方，其操作時間會縮短。(➜ 138)
A1-3: 電池是否已到達其使用壽命？電池的使用壽命是有限的。它取決於電池的使用方法，但是當進行了正確的充電之後，在普通的使用中，其操作時間也很短時，說明電池已經到達其使用壽命。

ENGLISH

Normal Recording

P1: Recording cannot be started even though the Movie Camera is supplied with power and the cassette is inserted correctly.

S1-1: Is the erasure prevention slider of the cassette open? If it is open (set to [SAVE]), recording is not possible. (➜ 22)

S1-2: Has the tape reached its end? Insert a new cassette. (➜ 22)

S1-3: Is the Movie Camera turned on? (➜ 30)

S1-4: Is the [VCR] Lamp lit? If it is lit, recording is not possible. (➜ 44)

S1-5: Is the Condensation Indication [💧] displayed? When condensation has formed, no functions except taking out the cassette can be operated. Wait until the Condensation Indication disappears. (➜ 136)

Other Recording

P1: The picture on the Finder suddenly stands still for a few seconds.

S1: Did you press the [PHOTO SHOT] Button? If you press the [PHOTO SHOT] Button, a still picture is recorded for approximately 7 seconds. After approximately 7 seconds, the Movie Camera switches back to the Recording Pause Mode. (➜ 38)

S2: Did you press the Still Button [❚❚]? If you press the Still Button [❚❚], the picture stands still. Simply pressing this button again to return to the normal moving picture. (➜ 42)

P2: The Auto Focus Function does not work.

S2-1: Is the Manual Focus Mode selected? If you select the Auto Focus Mode, the focus is adjusted automatically. (➜ 34)

S2-2: Is the recording subject or situation suitable for the Auto Focus Mode? The Auto Focus Function does not work correctly for some kinds of subjects and recording situations. In this case, use the Manual Focus Mode to adjust the focus. (➜ 148)

Editing

P1: Audio dubbing cannot be performed.

S1-1: Is the erasure prevention slider of the cassette open? If it is open (set to [SAVE]), editing is not possible. (➜ 22)

S1-2: Are you trying to edit parts of the tape recorded in the LP Mode? As the tracks recorded in the LP Mode are narrower than the heads, audio dubbing is not possible. (➜ 24)

中文

普通拍攝

Q1: 即使攝錄影機已經得到供電和正確地插入了錄影帶，也不能開始拍攝。

A1-1: 錄影帶的保險滑頭是否打開著？如果它是打開的 (設置在[SAVE])，則無法開始拍攝。(➜ 22)

A1-2: 錄影帶是否到達其結尾？請插入新的錄影帶。(➜ 22)

A1-3: 攝錄影機是否打開？(➜ 30)

A1-4: [VCR] (錄放影機) 燈是否亮起？如果亮起著，則無法開始拍攝。(➜ 44)

A1-5: 是否出現了冷凝指示[💧]？當內部形成冷凝時，除了取出磁帶之外，將無法進行其它操作。請等待，直至冷凝指示消失為止。(➜ 136)

其它拍攝

Q1: 電子尋像器上的圖像突然保持靜止幾秒鐘。

A1: 您是否按了[PHOTO SHOT] (拍照) 鈕？如果按了[PHOTO SHOT]鈕，將拍攝約7秒鐘的靜止圖像。約7秒鐘後，攝錄影機將返回拍攝暫停狀態。(➜ 38)

A2: 您按了靜止[❚❚]鈕嗎？如果您按了靜止[❚❚]鈕，圖像將保持靜止。簡單地再按該鈕，便可恢復普通的動景畫面。(➜ 42)

Q2: 自動聚焦功能不能工作。

A2-1: 是否選擇了手動聚焦狀態？如果您選擇了自動聚焦狀態，則會自動進行聚焦調節。(➜ 34)

A2-2: 拍攝目標物和狀況是否適合自動聚焦狀態？對於某種類型的目標物和拍攝狀況，自動聚焦功能將無法正常工作。在此情況下，請使用手動聚焦狀態來調節聚焦。(➜ 148)

編輯

Q1: 不能進行音頻拷貝。

A1-1: 錄影帶的保險滑頭是否打開著？如果它是打開的 (設置在[SAVE])，則無法進行編輯。(➜ 22)

A1-2: 您是否正在編輯用LP狀態拍攝的錄影帶部分？由於LP狀態下拍攝的磁跡窄於磁頭，所以無法進行音頻拷貝。(➜ 24)

ENGLISH

Indications

P1: The Time Code becomes incorrect.
S1: In the Slow Motion Playback Mode in reverse direction, the counter of the Time Code Indication may not be stable, however, this is not a malfunction.

P2: The Remaining Tape Time Indication disappears.
S2: If you record a still picture in the Photoshot Mode, the Remaining Tape Time Indication disappears temporarily. However, if you switch the Movie Camera over to the Normal Recording Mode, it appears again.

P3: The Remaining Tape Time Indication does not match the actual remaining tape time.
S3-1: If scenes of less than 15 seconds are recorded successively, the remaining tape time is not indicated correctly.
S3-2: The Remaining Tape Time Indication may show a remaining tape time that is 2-3 minutes shorter than the actual remaining tape time.

Playback (Picture)

P1: No playback picture is reproduced when pressing the Play Button [▶].
S1: Did you press the [VCR/CAMERA] Button so that the [VCR] Lamp lights? When the [VCR] Lamp is not lit, no playback functions can be operated. (➔ 44)

P2: Mosaic-like patterns appear in the picture during Cue, Review or Slow Motion Playback.
S2: This phenomenon is a characteristic of the digital video system. This is not a malfunction. (➔ 46)

P3: I want to play back the picture on a TV.
S3: If you attach the Output Terminal Box to the Movie Camera, you can connect the Movie Camera to a TV. (➔ 52)

P4: The Movie Camera is correctly connect to a TV correctly, but no playback picture is reproduced.
S4: Did you select "Video Input" on the TV? Carefully read the operating instructions for your TV and select the channel that matches the input sockets used for connection.

P5: The playback picture is not reproduced clearly.
S5: Are the video heads on the Movie Camera dirty? If the video heads are dirty, the picture cannot be played back clearly.

中文

指示

Q1: **時間編碼不當。**
A1: 在反向慢動作放影中，時間編碼指示的計數器可能不穩，然而，這並非功能失常。

Q2: **剩餘磁帶時間指示消失。**
A2: 如果您在拍照狀態下拍攝了靜止圖像，剩餘磁帶時間指示將暫時消失。然而，如果您將攝錄影機切換至普通拍攝狀態時，它將再次出現。

Q3: **剩餘磁帶時間指示與實際剩餘磁帶時間不一致。**
A3-1: 如果連續拍攝的場景短於15秒時，剩餘磁帶時間將無法正確表示。
A3-2: 剩餘磁帶時間指示表示的剩餘時間，可能會比實際剩餘時間要短2、3分鐘。

放影(圖像)

Q1: **按放影[▶]鈕時，未出現播放的圖像。**
A1: 您是否按了[VCR/CAMERA](錄放影機/攝錄影機)鈕，使[VCR]燈亮起？當[VCR]燈不亮時，將無法進行放影功能的操作。(➔ 44)

Q2: **在快進尋影、倒帶尋影或慢動作放影中，圖像上出現了條紋狀雜訊。**
A2: 此現象為數位影像系統的特徵。並非功能失常。(➔ 46)

Q3: **本人想在電視機上播放圖像。**
A3: 如果您將輸出端子箱安裝在攝錄影機上時，便可將攝錄影機連接至電視機。(➔ 52)

Q4: **攝錄影機已正確地連接至電視機，但不出現播放的圖像。**
A4: 您是否在電視機上選擇了"影像輸入"？請仔細閱讀電視機的使用說明書，並選擇與所連接使用的輸入插孔相配的頻道。

Q5: **播放的圖像不清晰。**
A5: 攝錄影機上的影像磁頭是否很髒？如果磁頭很髒，則無法播放出清晰的圖像。

ENGLISH

Playback (Sound)

P1: Different sounds are played back together.

S1: Is [AUDIO OUT] set to [MIX] on the VCR Mode Menu? If you have performed audio dubbing on a cassette for which you set [AUDIO REC] to [12bit] when recording, the original sound and the sound dubbed with audio dubbing are played back together. It is also possible to play them back individually. (➜ 90)

P2: The original sound was erased by performing audio dubbing.

S2: If you perform audio-dubbing on a recording made in the [16bit] Mode (➜ 88), the original sound is erased. If you want to keep the original sound, be sure to select the [12bit] Mode for the original recording.

Others

P1: The cassette cannot be taken out.

S1: Is the Movie Camera supplied with power? Is the AC Adaptor correctly connected or the Battery correctly inserted? To remove the cassette, the Movie Camera must be supplied with power, however, it is not necessary to set the [POWER ON/OFF] Switch to [ON].

P2: No operation except taking out the cassette can be performed.

S2: Is the Condensation Indication [💧] displayed? If condensation has formed inside the Movie Camera, it automatically switches off and prevents any operation except taking out the cassette. Wait until the Condensation Indication disappears. (➜ 136)

P3: The Remote Controller does not work.

S3-1: Is the button-type battery in the Remote Controller exhausted? If the Remote Controller does not work if you use it near the Remote Controller Sensor on the Movie Camera, the button-type battery is exhausted. Replace it with a new battery. (➜ 98)

S3-2: Is the correct Remote Controller Mode selected? If the Movie Camera's setting for [REMOTE] on the Menu and the mode selected on the Remote Controller are not matched, operating the Movie Camera with the Remote Controller is not possible and the [REMOTE] Indication is displayed. (➜ 100)

中文

放影(聲音)

Q1: 一起播放不同的聲音。

A1: 在菜單上的[AUDIO OUT](音頻輸出)選擇中，是否已將[AUDIO OUT]設定為[MIX](混合)？如果您已經在拍攝中將[AUDIO REC](音頻錄製)設定為[12位]的錄影帶上進行了音頻拷貝時，原來的聲音和音頻拷貝所增加的聲音將一起得到播放。也可分別進行播放。(➜ 90)

Q2: 進行音頻拷貝時抹消了原來的聲音。

A2: 如果您在以[16位]狀態(➜ 88)下拍攝的錄影帶上進行音頻拷貝時，原來的聲音將被抹消。如果您想保留原來的聲音時，必須在原來的拍攝中選擇[12位]狀態。

其它

Q1: 不能取出錄影帶。

A1: 攝錄影機是否通電？交流轉接器的連接是否正確？或電池插入是否恰當？取出錄影帶時，攝錄影機必須通電，然而，不必將[POWER ON/OFF]開關設置在[ON]。

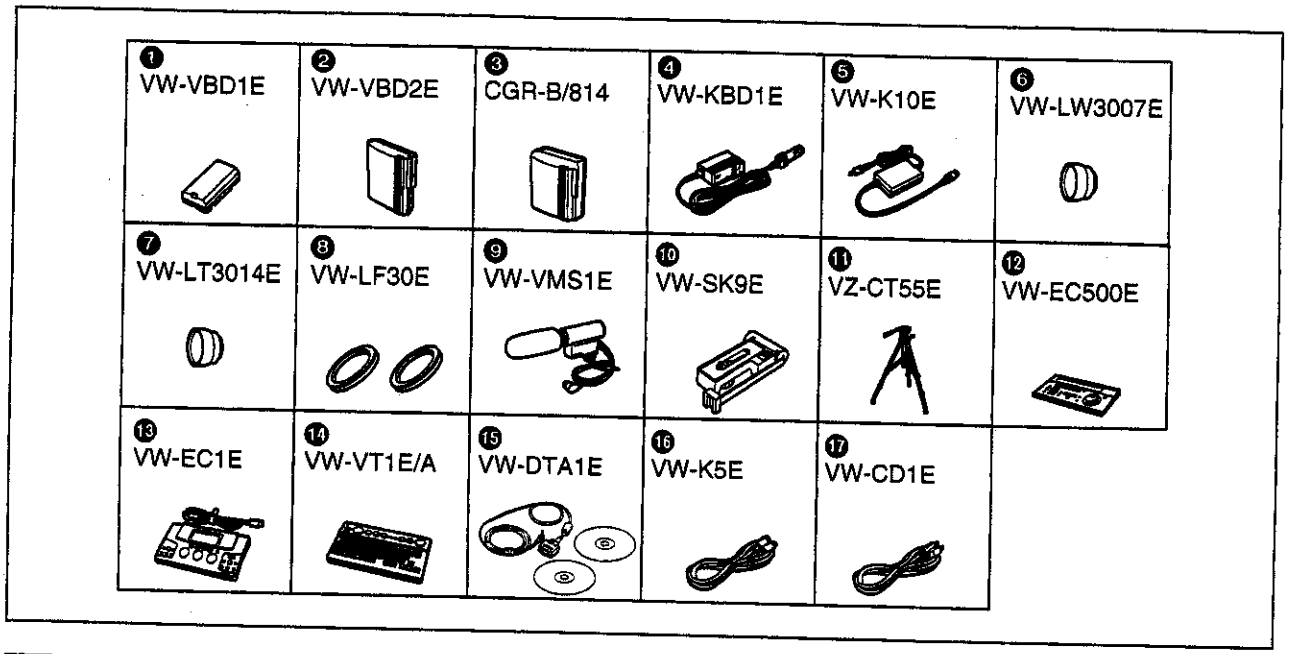
Q2: 除取出錄影帶之外，不能進行其它操作。

A2: 是否出現了冷凝指示[💧]？當攝錄影機內部形成冷凝時，除了取出磁帶之外，本機會自動切斷電源，並將無法進行其它操作。請等待，直至冷凝指示消失為止。(➜ 136)

Q3: 遙控器不工作。

A3-1: 遙控器中的鈕扣式電池是否耗盡？如果您在靠近攝錄影機上的遙控感應器附近進行使用，而遙控器仍無法工作，說明鈕扣式電池已經耗盡。請將其更新。(➜ 98)

A3-2: 是否選擇了正確的遙控器狀態？如果攝錄影機菜單上的[REMOTE](遙控)設定和遙控器所選擇的狀態不配時，將不可能用遙控器操作攝錄影機，並會出現[REMOTE]指示。(➜ 100)



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Optional Accessories

❶ Battery Pack

❷ Battery Pack

❸ Battery Pack

❹ Car Battery Charger

❺ 5-Pin Synchro Cord

❻ Wide Conversion Lens

❼ Tele Conversion Lens

❽ Filter Kit

❾ Stereo Zoom Microphone

❿ Shoe Adaptor

⓫ Standard Tripod

⓬ Editing Controller

⓭ Editing Controller

⓮ Video Titler

⓯ Personal Computer Connection Kit

⓰ Edit Cable

⓱ DV Cable

中文

選購附件

❶ 電池組

❷ 電池組

❸ 電池組

❹ 汽車電池充電器

❺ 5針同步纜線

❻ 廣角鏡頭

❼ 長焦鏡頭

❽ 濾光鏡組件

❾ 立體聲變焦麥克風

❿ 座轉接器

⓫ 標準三角架

⓬ 編輯控制器

⓭ 編輯控制器

⓮ 影像字幕編寫器

⓯ 個人微電腦連接

⓰ 編輯纜線

⓱ DV(數位影像)纜線

ENGLISH

Specifications

Digital Video Camera Information for your safety

Power Source:	DC 7.9/7.2 V
Power Consumption:	Recording 5.5 W

Recording Format:	Mini DV (Consumer-use Digital Video SD Format)
Tape Used:	6.35 mm digital video tape
Recording/ Playback Time:	SP: 60 min., LP: 90 min. (with DVM60)
Video	
Recording System:	Digital Component
Television System:	CCIR:625 lines, 50 fields PAL colour signal
Audio	
Recording System:	PCM Digital Recording 16 bit (48 kHz/2ch), 12 bit (32 kHz/4ch)
Image Sensor:	1/3-inch CCD Image Sensor
Lens:	Auto Iris, F1.4, Focal Length; 4.7-47 mm, Macro (Full range AF)
Filter Diameter:	30.5 mm
Zoom:	10:1 power Zoom
Microphone:	Stereo
Standard Illumination:	1,400 lx
Minimum Required Illumination:	1 lx (Digital Gain-up Mode)
Video Output Level:	1.0 Vp-p, 75 ohm
S-Video Output Level:	Y Output: 1.0 Vp-p, 75 ohm C Output: 0.3 Vp-p, 75 ohm
Audio Output Level:	316 mV, 600 ohm
Digital Still Picture:	Digital Still Picture Output, Control Signal Input/Output (Transfer rate: max. 115 kbps)
Digital Interface:	DV Input/Output Terminals (compliant with IEEE1394, 4-pin)
Dimensions:	Approx. 67 (W) × 95 (H) × 132 (D) mm
Weight:	Approx. 520 g (without Battery) Approx. 630 g (with VW-VBD1 and DVM60)
Operating Temperature:	0°C - 40°C
Operating Humidity:	10% - 80%

AC Adaptor

Information for your safety

Power Source:	AC 100-240 V, 50 - 60 Hz
Power Consumption:	20W
DC Output:	DC 7.9 V, 11 W (Movie Camera Operation) DC 7.9 V, 1.2 A (Battery Charging)

Dimensions:	72 (W) × 43 (H) × 98 (D) mm
Weight:	Approx. 170 g

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

中文

規格

數位攝錄影機 您的安全信息

電　源　：	直流7.9V/7.2V
電力消耗：	拍攝中5.5W

拍攝格式：	微型DV (用戶使用數位影像SD格式)
使用錄影帶：	6.35mm數位錄影帶
錄影/放影時間：	SP：60分鐘 LP：90分鐘 (使用DVM60磁帶時)
影像	
拍攝系統：	數位元件
電視制式：	CCIR：625線，50幀PAL彩色信號
音頻	
錄製系統：	PCM數位錄製 16位 (48kHz/雙聲道) 12位 (32kHz/四聲道)
圖像感應器：	1/3 英寸CCD圖像感應器
鏡頭：	自動光圈，F1.4，聚焦長度：4.7~47mm，微距 (全範圍AF)
濾光鏡直徑：	30.5mm
變焦：	10倍動力變焦
麥克風：	立體聲
標準亮度：	1,400lx
最低要求亮度：	1lx (數位超高靈敏度狀態)
影像輸出電平：	1.0Vp-p，75歐姆
S影像輸出電平：	Y (亮度信號) 輸出：1.0Vp-p，75歐姆 C (彩色信號) 輸出：0.3Vp-p，75歐姆
音頻輸出電平：	316mV，600歐姆
數位靜止圖像：	數位靜止圖像輸出，控制信號輸入/輸出 (轉換率：最大115kbps)
數位接口：	DV(數位影像)輸入/輸出端子(對應於IEEE1394，4針)
尺寸：	約67 (寬) × 95 (高) × 132 (深) mm
重量：	約520克 (電池組除外) 約630克 (使用VW-VBD1和DVM60時)
操作溫度：	0℃ - 40℃
操作濕度：	10% - 80%

交流轉接器

您的安全信息

電　源　：	AC100 - 240V，50 - 60Hz
電力消耗：	20W
直流輸出：	DC7.9V，11W (攝錄影機操作時) DC7.9V，1.2A (電池組充電時)

尺寸：	約72 (寬) × 43 (高) × 98 (深) mm
重量：	約170克

重量和尺寸為近似值。
規格若有變更，恕不另行通知。